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*Ch. L. 11.*

# THE WAR CABINET

*88*

REPORT FOR THE YEAR 1918.

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**Presented to Parliament by Command of His Majesty.**

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L O N D O N :  
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## INTRODUCTION.

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The record herewith submitted is of a period to which no immediate survey can do justice. The magnitude and intensity of the operations, the swift reversal of the fortunes of war, and the political upheavals following the military disaster among the Central Powers, mark the year of climax. In the rapid succession of striking events, developments which in normal times would have attracted general attention passed almost unnoticed. But, deeply significant as have been many of the steps in national and international organisation, the downfall of the military power of the Central Empires stands out as the central theme of 1918.

The year opened with both sides preparing themselves again for the shock of arms. It was known to the Allies that the forces of the Central Empires would make such an effort to break through as not even the preceding years had witnessed. On the East, Russia had been crushed in arms and distracted by internal revolution. On the West the last great effort was therefore called for,—to break through the united line of the Allies, to cut their force in two and to defeat each half in turn, driving the English to the Channel Ports and beyond, annihilating the remainder of the gallant Belgian Army, capturing the French capital, and crushing the great army and nation of France. It was a stroke to be dealt straight at the heart.

For four months, from March 21st to July 17th, 1918, the enemy's battle front pressed forward by great advances. The Allied line bent heavily back, but it held, and the effort to break through failed. On July 18th the tide turned, and in four months—from July 18th to November 11th—in a succession of fierce and amazing attacks the enemy was driven as swiftly back, the elaborate and almost impregnable lines of his defence were breached, and his armies were compelled to sue for peace, while internal political upheavals rapidly overthrew the Bulgarian, the German and the Austrian monarchies. History has no parallel to so great, so sudden and so complete a reversal. But the defence of liberty, which first banded the Allies together, in adversity led

only to the closing of their ranks and the strengthening of their determination, and, at the most critical period on the Western Front, brought to their aid the fresh forces of the United States of America.

The wonderful achievements on the Western Front were greatly helped and made complete by the success which attended the Allies in the other theatres of war. The heroic advance of the Serbian, Greek and Allied forces in the Balkans, which swiftly recovered a large part of the ancient kingdom of Serbia and by a divine justice made that sorely tried country among the first of the invaded territories to be redeemed, the final deliverance of Palestine and the annihilation of the Turkish forces in General Allenby's brilliant campaign, the revenge of Caporetto by Italy, and the defeat and driving back of the Austrians, threatening thereby the flank of the Central Powers, all contributed to the overwhelming defeat of the enemy. But it must never be forgotten that it was on the Western Front, and in the magnificent resistance there offered to the last violent onset, that victory was secured. Successes on other Fronts would not have availed, save after long years of protracted and costly sacrifice, if the Western line had been broken. The part played by the British armies during the latter stages of the campaign of 1918, despite the fact that they had already borne the brunt of the German offensive, is without question the most glorious page in British military annals, and Marshal Foch himself testified to the fact that it was the hammer blows of the British Army which broke through one fortified position after another on the Hindenburg line and assured the Allied success during the course of the year.

These great events on land were, however, only made possible by the continued control of the sea, which was secured by the British and Allied navies. The year 1918 was marked by no great sea action. But it was a period of incessant and increasing pressure of sea power, the cumulative effect of which became steadily more apparent. The Grand Fleet, by its constant vigilance, safeguarded the world-wide operations of the Allies, while its support was necessary to the mine-sweeping, mine-laying and blocking-up policy so fearlessly and successfully carried out during the year. Nor should it be forgotten how great was the influence of the steady pressure of sea power on the morale of the German people, and how in the autumn of 1918 the mutiny of the German sailors precipitated the revolution. But it was the combination of all arms, on land, on sea, and in the air, and the generous and eager spirit of co-operation between them which achieved victory.

The overwhelming disaster which befell the Central Powers in the latter part of 1918 tends to weaken the recollection of the

strength of the German position in the early months of the year. It is necessary, however, to keep this in mind in order to estimate the task which the Allies accomplished. On November 28th, 1917, the enemy had concluded an armistice with Russia, and in the latter part of that year and during the early months of 1918 he had transferred a large number of troops, well exercised in open warfare, from the East to the West. In February a Treaty of Peace had been signed between Germany and the Ukraine, whose independence from Great Russia was thereby recognised. In March the Soviet Government at Moscow signed a peace on German terms. In the same month Germany had intervened in Finland and proceeded to organise it as a basis both for land and sea operations. In May the Treaty of Bucharest was signed with terms of extreme severity for Rumania. Meanwhile the German penetration and exploitation of Russia continued, and the Black Sea, like the Baltic, became a German lake. The month of May saw German domination in Eastern Europe at its height. There was thus imminent danger that not only European but also Asiatic Russia would rapidly pass under German control, and that, with the resources of East Europe, of Asia Minor and of a large tract of Asia open to exploitation, the war would be very seriously, if not indefinitely, prolonged. It was therefore imperative to take steps to prevent so far as possible the development of this condition of affairs in Russia, while the pressing need of the brave forces of the Czecho-Slovaks in that country increased the urgency of Allied support. At the same time pressure was brought to bear on neutral countries with a view to making the blockade of Germany as effective as possible. These steps—intervention in Russia and the tightening of the blockade—helped materially to reduce the resistance of the Central Powers and to shorten the war.

In considering, however, the events of the last year of war two characteristics especially mark this period, viz., the growth of inter-allied unity of control and the intensification of national effort. The progressive strain of the war called for the subordination of all individual national interests and prestige in order to achieve a common end. In this sense the most striking and representative act of the year was the establishment of the unity of military command under Marshal Foch. The trust placed in him more than justified expectation. The masterly strategic plans which he framed were brilliantly executed, and the world owes to him an eternal debt of gratitude.

Attention was directed in the Report for 1917 to the establishment during the war of inter-allied organisations. In the latter months of 1917 considerable development had taken place in this sphere, notably by the creation of the Supreme War Council which was agreed to at Rapallo in November, 1917. A brief



account of the very important proceedings of this Council during 1918—including the steps which led to the Unity of Command—is given in the present Report. In December, 1917, the creation of an Allied Naval Council was also announced. This Council held numerous meetings during 1918, with the result that much closer co-operation of naval effort was secured in carrying out the very extensive and arduous operations of the Allied navies. Early in 1918 a further step of very great importance in inter-allied organisation was effected by the establishment of the Allied Maritime Transport Council. The heavy losses of the world's mercantile shipping due to submarine activity and mines, and the increasing pressure on tonnage owing to the problem of transporting to Europe the American Army while maintaining the necessary supplies of munitions, raw materials and food, made imperative the most complete co-ordination of the shipping resources of the Allies. All questions of supply had to be considered in the light of shipping, and it was necessary to determine carefully priority in accordance with the most urgent needs of the time. Accordingly there was established in connection with the Allied Maritime Transport Council a series of Inter-allied Programme Committees charged with the work of co-ordinating the purchase and distribution of the principal imported supplies. By this means the chief commodities were in effect rationed internationally. Thus in munitions there was established the Inter-Allied Munitions Council, previous to the establishment of which there was no sure method that the Ally most in need of a particular supply was in fact receiving that supply in preference to any other Ally. This development in the field of munitions supply was the corollary and complement of unity of command in the sphere of strategy. Similarly, in respect of other necessary commodities, such as coal, petrol, wool, the inter-allied Committees controlled the programmes of supply, which were in turn co-ordinated by the Allied Maritime Transport Council in relation to the shipping available. As with munitions and raw materials so also with food supply. Already in 1917 and even earlier, important inter-allied organisations for the purpose of allotting supplies and controlling prices of food and feeding stuffs had been established, but, with the increasing urgency of the food problem in different countries and the necessity of greater unity of control, the Inter-allied Food Council was established. The year 1918 thus proved how vital was the factor of unity of economic control and the necessity of securing common action by all the Allies. The experience gained is of great importance for the future development of international organisation. Each country within itself found it essential to control in a very large measure its economic life. But this was not sufficient, and the longer the war continued the greater was seen to be the need for unity of economic control among all the Allies. Only in this way could the needs of each be fairly adjusted and the most effective use made of the resources of the Allies.

Meanwhile the intensification of the national effort reached its highest point. This was seen on every side of our national life. In man-power the raising of the military age in Great Britain to 51, and to 56 in the case of medical practitioners, the progressive combing out of men from the mines, from munitions, from agriculture and other essential industries, the increasing dilution of skilled labour and the extended enrolment of women to carry on the work which had hitherto been done by men, are evidence of the intensification of the national effort. The fighting forces on land, despite losses, were maintained at a higher figure than in the preceding year, and it is a striking testimony to the unsparing effort made by the nation that when at the end of four months of desperate fighting and very heavy casualties the great German offensive was brought to a standstill, the British forces in France were slightly stronger in men than before the German attack in March.

On sea there was a great development of all kinds of craft for defeating the submarine policy of the enemy and tightening the naval and economic blockade. During the year the displacement of tonnage completed for the Royal Navy amounted to 460,000 tons, a very large proportion of which was built to meet the demands for torpedo boat destroyers and small anti-submarine craft. The ships of all kinds employed on naval service towards the end of the year had a tonnage of  $6\frac{1}{2}$  millions as against 6 millions in the previous year, while the number of transports, fleet attendants, oil ships and similar vessels had risen from 700 to nearly 800. The declining figures of losses from submarine and enemy action bear witness to the sure effect of the naval measures. In the quarter ending September the total allied and neutral losses of merchant vessels amounted in 1918 to 915,513 gross tons as compared with 1,494,473 gross tons in 1917. In 1917, 137 vessels were sunk or damaged by mine; in 1918, in the ten months up to the Armistice, the number was 19, of which only 9 occurred in the last seven months of the war. In the third year of the war, 151 steam trawlers were sunk by submarine, while in the fourth year of the war the number had fallen to 4, and none were sunk in the last three months of war. The mastery of the submarine menace was thus progressive despite the developments which the enemy made in the range and efficiency of his craft. Meanwhile, the transport effected during the year was on an unprecedented scale. In addition to the regular work of maintaining supplies for the overseas forces, an average of over 150,000 American troops per month during the last six months of the war were transported in British ships across the Atlantic.

1918 also saw the climax in the output of munitions, though preparations had been made to exceed in 1919, if the war had continued, the stupendous production of 1918. The output of artillery equipment was such that in a few weeks the heavy

losses due to the German offensive in March had been made good, and at the end of the German offensive the army in France had 700 more guns, including trench howitzers, than it had on the opening of the offensive in March. Despite the continuous fighting and the fact that in a fortnight of the final advance the discharge of shell was about twice as great as during any fortnight of 1917, supplies at the end of the campaign were more abundant than ever. At the same time great developments were made in the design and production of tanks, and in the course of the year no less than 1,359 tanks were delivered, while preparations had been made for a largely increased output in 1919. The lead which had been gained in this important arm was never lost, and in no service was the value of the initiative more clearly seen. In aircraft production the year 1918 also saw a striking advance, both in aeroplanes and seaplanes, the increase in aeroplanes being 136 per cent. over that of 1917, and in seaplanes 69 per cent. over that of 1917. Many other instances can be seen in the record of the output of munitions showing how that, despite difficulties of raw material and shortage of labour, the year 1918 marked the highest point in the production of munitions and prepared the way for an even greater output in 1919 had that been necessary.

At the same time increased efforts were made to repair the losses sustained by merchant shipping from submarines as well as from the heavy maritime loss incidental to sea traffic under the abnormal conditions of war. In considering the output of new mercantile shipping, three facts have to be kept in mind ; first, the large output which was still maintained of ships for the services of the Navy ; second, that special types of vessels requiring a larger period of construction than ordinary cargo boats, amounting to a tonnage of 392,484 gross tons, were completed during the year ; and third, that during 1918 there was an abnormal growth in the volume of merchant ship repairs, due to the improvement in organising the salvage of ships damaged by mines or torpedoes. The number of mercantile ships repaired in the year was 8,539, amounting to 27,248,561 gross tons. By sacrificing repair work more new ships could have been put into service, but the policy adopted yielded this country and her Allies the greatest possible carrying power. There was the further fact that the demand on man-power and the shortage of material alike restricted output in shipbuilding. Nevertheless, the tonnage completed in 1918 amounted to 1,534,110 tons as compared with 1,163,474 tons in 1917 and 541,552 tons in 1916. The result of the combined efforts of the Navy, together with the shipbuilding policy, was steadily to reduce the adverse balance of sinkings versus construction from 485,345 gross tons in April, 1917, to 6,821 gross tons in September, 1918, after which the deficit disappeared and each month showed a surplus. Thanks, however, to the provision for quick repairing of damaged ships and the efficient concentration of shipping on the shortest routes, together with improved

organisation at the ports, there was, from January, 1918, a steady increase in the number of sailings to and from British ports. In spite of the very heavy demands on British tonnage for the conveying of troops and war stores on behalf of the United States and of the increased assistance given to our European Allies, excluding oil for the Navy, 31 million tons were imported during the year with little more than  $6\frac{1}{2}$  million gross tons of shipping available for this purpose, whereas in the year 1913, when the total amount of British tonnage available for imports was approximately 12 million tons, the imports in British vessels amounted to 35 million tons. The organising of the economic use of shipping was thus most successfully achieved.

Special efforts were also made to ensure that the railway system of the country contributed its utmost to the service of the war. Despite serious shortage of rolling stock and the fact that only the most urgent repairs could be carried through, 12,000 wagons and a large number of locomotives were sent overseas to meet the pressing requirements of the Army. Further reductions were made in passenger train services, which were cut down to 40 per cent. less than in 1913. Owing to the danger of sea transport millions of tons of minerals and foodstuffs normally carried coastwise had to be conveyed by rail and canal, while increased numbers of troops—including hundreds of thousands of American troops landed at various ports—had to be moved. But in face of the grave military situation over 54,000 men were withdrawn from the railways during the year for service with the forces, their places being taken largely by women or men ineligible for military service. Considerable relief to the railway system was given by the development and control of canal transport, a very large amount of food, munitions and coal being carried during the year.

Meanwhile, despite the heavy claims in 1918 of the Army, the Navy, munitions, shipbuilding and transport, the output was well maintained, and in some cases remarkably increased, in the two other great fields of production, namely, raw materials and food. The difficulties of the coal situation were intensified during 1918 owing to the need of withdrawing a further 80,000 men from the mines to meet the military emergency, while at the same time the loss of the French mines in the Pas de Calais necessitated a large additional supply of coal to France. The situation was met by the curtailment of supplies for all industrial purposes not absolutely essential to the conduct of the war and by the extension throughout Great Britain of the system of fuel rationing for domestic purposes, which had been applied to the London areas in the winter of 1917-18.

Another matter of great urgency in 1918 was the supply of mineral oils. Already in 1917 the imports were more than double the pre-war import, but owing to the increased requirements of

the Navy and of the transport and air services there was serious danger of depletion of stocks, and strenuous efforts were directed to dealing with this problem. Home production was developed, economies enforced, civilian consumption drastically cut down and new methods devised by which the oversea carriage of a greater volume of imports was secured. By these means the increasing demands of the services were met and a considerable reserve stock built up, so that in October, 1918, against a monthly consumption of 495,156 tons, stocks were held amounting to 1,813,711 tons.

Again, in the supply of timber, 1918 marked a further development of the policy which had been instituted in 1917. The necessity of economising shipping tonnage had led to very severe restrictions in imports of timber, which were reduced to 2,875,000 tons in 1917 as compared with 11,500,000 tons in 1913. At the same time the policy of felling home-grown timber was pressed forward and the annual supply was raised from 900,000 tons before the war to 3,000,000 tons in 1917. In 1918 the output of home-grown timber was raised to 4,250,000 tons, or nearly five times the pre-war scale, releasing thereby at a time of great shipping shortage a tonnage space of over one million tons for the conveyance of increased munitions, food and supplies for the American Army.

Finally, the year 1918 marked a great effort in increasing home produced food and saw in large measure the realisation of the programme of food production which had been planned early in 1917. In that year there was an increase of nearly one million acres in the crops of the United Kingdom. In 1918, a further increase of nearly two million acres was accomplished. Thanks to a favourable seed-time and summer and to the organised efforts made to deal with the unfavourable conditions of the later weeks of harvest, a very large crop was safely gathered and assisted in a most important measure to secure the food position of the country and to enable supplies to be diverted to the other countries which were in greater need. Meanwhile, the efforts to maintain and increase economy in the use of food supplies and to secure more equitable distribution were unrelaxed. Shortage of particular commodities was experienced, but there was at no time a danger of a failure of supplies to meet the essential needs of the community. The problem of food control has presented great difficulties, but the general and willing co-operation of the public in accepting the conditions imposed by war enabled an organised system to be quickly established, which greatly mitigated the hardships and anxieties of the period. The combination of a system of central control with a very large measure of administrative decentralisation enabled the machinery of rationing to be carried through with due regard to special local conditions.

In reviewing thus summarily some main features of the intensification of the national effort, reference must also be made to the steady financial support which was essential to the successful conduct of the war. The issue of National War Bonds during the year ending December 31st, 1918, amounted to £1,231,666,150, while the sale of War Saving Certificates in the same period amounted to £102,000,000. The policy of meeting a very considerable proportion of war expenditure out of taxation was also continued, and in the Budget for the year 1918-19 additional taxation was imposed, which it was estimated would produce in the current year £67,000,000, and in a full year £114,500,000. The total revenue for the financial year 1918-19 was estimated at the very large sum of £842,050,000, a sum which, as events proved, was substantially exceeded.

While these measures essential to the immediate prosecution of the war and the maintenance of the civilian community were carried out, steps were also taken to advance the work of providing better foundations for our national life. In the sphere of industrial relations the policy of the Whitley Committee was actively followed up and great progress was made in the organising of Joint Industrial Councils. By the end of 1918, 19 such Councils had been established, while in seventeen industries Interim Trade Committees preparatory to the establishment of complete Industrial Councils were appointed. Inquiries and negotiations were also set on foot with a view to the extension of Industrial Councils to other industries where conditions of a complex character prevented their immediate realisation. There was thus achieved in 1918 a progress towards representative control in industry which has great promise for better relations between employers and employed. The policy in view is comprehensive, including not only the establishment of Central Councils, but also of District Councils and of workshop Committees. At the same time an important step was taken in another direction by extending the operation of the Trade Boards Act and thereby securing a higher standard in the less organised trades, where lower scales of wages have prevailed. The establishment of Industrial Councils and the development of the system of Trade Boards are important landmarks in the evolution of a permanent industrial policy, and are properly part of the work of reconstruction.

The signing of the Armistice brought immediately into operation the questions of demobilisation and resettlement. These matters had for a considerable time past engaged the attention of important Reconstruction Committees and of the Departments of State immediately concerned. There was accordingly a carefully prepared plan available, and steps were at once taken to

secure the return of pivotal men who were most important to the work of further demobilisation and to the carrying on of national services and the most essential industries. By December 31st a total of 1,648 officers and 286,804 men had been released from the services. Simultaneously steps were taken to cease the output of munitions of war and other military and naval supplies, and to release men and women from munition work. In the case of industry, however, the problem is only to a limited extent the disbanding of industrial staffs, and is in the main a question of enabling industries to turn back from war to peace work and to adjust their employment to the new demand. It was foreseen that in this operation there must be a considerable measure of dislocation, and events have proved that the relaxation of the strain, the uncertainty of costs of production and also of demand at the new range of prices create a transition period attended by difficulties which cannot be resolved by any simple action taken on the part of the State. Steps were taken without delay to remove, where conditions permitted, the control over raw materials and other supplies, and provision was made to secure workers against a period of unemployment by the scheme of out-of-work donation. It is only gradually, however, after a disturbance of such magnitude extending over so many years, that trade and industry can resume their normal channels. Fortunately, the shortage of tonnage which at one time seemed likely seriously to hinder the progress of reconstruction has proved much less acute than was anticipated. This in itself has greatly facilitated the work of decontrolling both raw materials and food supplies.

The year 1918 was also marked by important steps taken in social policy. The Education Acts of 1918 for England and Scotland lay the foundations of a national system of continuation education. The establishment of a Ministry of Public Health and the problems connected therewith also engaged the close attention of the Government, and negotiations were carried on with the various representative bodies in order to secure a wide measure of reform which has been considered necessary to a new organisation of the Public Health Services of this country. At the same time a survey of the housing requirements was made, and schemes were prepared with a view to carrying out a comprehensive measure for the better housing of the people of this country. The work of the Liquor Control Committee was continued and extended. In industry, increasing attention has been given to the problems of industrial hygiene and the development of welfare organisation. Finally, the Ministry of Reconstruction pushed forward enquiries into a wide range of different subjects affecting the general problem of social well-being. It may thus be claimed that in the midst of war and later of the immediate problems of demobilisation, the long range questions of social reform have not been neglected. Special attention was also directed to the question of land settlement, and schemes were prepared for facilitating the acquisition of land and in particular



for settling ex-service men on the land and for the advancement of agriculture and rural industries.

Finally, in the political and constitutional sphere, the year 1918 marked efforts made in several important directions. In April, at a date when the German Spring offensive had been so serious as to require in the opinion of the Government the introduction of the Military Service Bill, 1918, the report of the proceedings of the Irish Convention was received. The failure of the Convention to reach "substantial agreement" threw upon the Government the responsibility of framing a measure which it was hoped would secure the support of Parliament. A Cabinet Committee was immediately appointed to prepare a Bill, but the public agitation in Ireland, following the introduction of the Military Service Bill in April, and the disturbed state of that country, made it, in the opinion of the Government, fruitless to attempt at such a time to proceed with the highly contentious problem of a settlement.

In July, the very important Report of the Secretary of State for India and of the Governor General on Indian Constitutional Reform was published. Following out of the consideration of the Report two Committees have conducted enquiries during the winter of 1918-19 into questions relating to the franchise and the electorate for the new Councils, and into the demarcation of subjects between the "transferred" and "reserved" groups proposed in the Report.

Owing to the passage of the Representation of the People Act, 1917, and the great change thereby involved in the electorate and to the vital importance of a clear mandate on the issues of a peace settlement and of reconstruction policy, the Government considered it right to have a General Election at as early a date as possible after the conclusion of the Armistice. The election was accordingly held in the second week of December.

The year 1918 was also notable for two sessions of the Imperial War Cabinet. The war has had a very far-reaching influence on the Empire. The bond of fighting and suffering in a common cause had brought all parts of the Empire closer together, and made more urgent the need of increased co-operation in the Councils of the Empire. It was therefore natural that a year of crisis and climax witnessed a further development in the representative machinery of self-government within the Empire. The Imperial War Cabinet, which had held its first session in 1917, met for its second session on June 11th, 1918, at a critical phase of the military operations on the Western Front, and continued its meetings until August. Before dispersing, however, and in order to secure greater continuity in the work of the Imperial War Cabinet and to provide a permanent means of consultation during the war on the more important questions of common interest, a

resolution was adopted on July 30th, which declared that the Prime Minister of each Dominion has a right to nominate a Cabinet Minister, either as a resident or visitor in London, to represent him at the meetings of the Imperial War Cabinet to be held regularly between the plenary sessions, and arrangements were made for the representation of India at those meetings. Owing, however, to the rapid progress of events in the latter half of the year, it was necessary to summon again in 1918 the Imperial War Cabinet, and the third session was opened on November 20th, in order to deal with the many questions relating to the peace settlement. The year thus marked a closer association with the self-governing Dominions and with the Empire of India alike in the vital matters of war and peace.

In a brief survey of a period crowded with events of such great magnitude and marked with developments in thought and organisation so rich in significance for the future, a true perspective at so near a distance is not easy, but the record which is herewith submitted for the information of the public will help in some measure to an understanding of one of the most remarkable years in the world's history.



## CHAPTER I.

**THE WAR CABINET.**

The higher direction of the war, so far as British activities were concerned, remained, in 1918, as in 1917, in the hands of the War Cabinet. There were several changes in the personnel of the War Cabinet during the year under review. On January 21st, 1918, Sir Edward Carson resigned from the War Cabinet, on April 20th, Lord Milner left in order to assume office as Secretary of State for War, and on April 18th Mr. Austen Chamberlain became a member. Thus in December, 1918, the War Cabinet was composed as follows :—

The Prime Minister.  
 The Rt. Hon. Earl Curzon.  
 The Rt. Hon. A. Bonar Law.  
 The Rt. Hon. G. N. Barnes.  
 The Rt. Hon. Austen Chamberlain.

General Smuts also continued to attend the meetings of the War Cabinet during 1918. The only exception to the principle described in the Annual Report for 1917—that the members of the War Cabinet should be free from administrative duties—was in the case of Mr. Bonar Law, who continued to fill the office of the Chancellor of the Exchequer and to act as the chief representative of the Government in the House of Commons. ✓

The War Cabinet system continued to operate on the same lines as were described in the Report for 1917, subject to such modifications as were required to meet the exigencies of the war. In the Report for 1917 it was described how a number of the less important but often highly complex questions were referred to individual members of the War Cabinet or to Committees of Ministers or others, sometimes with power to decide and sometimes for the purpose of carrying out detailed investigation on behalf of the War Cabinet, leaving the final decision for the Cabinet itself. The principal development in 1918 was in the extension of the system of permanent Committees to deal with groups of questions which previously had tended more and more to come within the range of subjects dealt with by particular members of the War Cabinet. The more permanent Committees were as follows :—

**War Priorities Committee.**

On September 20th, 1917, it was decided to set up the Aerial Operations Committee to report to the War Cabinet on the conditions prevailing with regard to manufacture of aircraft, and to make recommendations regarding the priority which should be given to this branch of manufacture, and as to the

effect such priority would have upon the output of other munitions for the Army and Navy. At their first meeting this Committee decided that they could more usefully perform their functions if they were constituted as a Standing Committee empowered to settle all questions of priority, not only of the Air Programme but of all other munitions programmes. Their recommendation to this effect was approved by the War Cabinet and the designation of the Committee was altered to that of the War Priorities Committee.

The constitution of the Committee as finally approved was : —

General Smuts, Chairman.

The First Lord of the Admiralty.

The Secretary of State for War.

The Minister of Munitions.

The Secretary of State, Royal Air Force.

The Minister of National Service.

Colonel F. J. Byrne, Secretary.

In addition the President of the Board of Trade and the Minister of Reconstruction were empowered to attend as members on those occasions when subjects affecting their Departments came up for discussion.

The method adopted by the War Priorities Committee was to set up interdepartmental Boards and Committees to deal with each subject or commodity where there was an excess of demand over supply. Including the Joint Priority Board, set up to secure the first stage of agreement on interdepartmental Priority, there were seventeen of these Sub-Committees. Each Board or Committee reported to the War Priorities Committee, which was available as a Court to decide any question or disagreement which might arise.

In addition to these Sub-Committees others were set up as follows :—

- (a) The Permanent Sub-Committee, which was composed of departmental officials of high standing and acted as an intermediate court between the War Priorities Committee and the several interdepartmental Sub-Committees.
- (b) The Permanent Labour Sub-Committee, set up to co-ordinate departmental methods of dealing with such labour matters as dilution, release of men for service with the Forces, etc.
- (c) The Works Construction Sub-Committee, which examined and decided upon the relative priority of all building and constructional schemes throughout the country. The usefulness of this Committee may best be judged by the fact that, during the period December, 1917, and September, 1918, the schemes which were refused priority or which were withdrawn

after consideration by the Committee amounted to a total of some £7,000,000.

- (d) The Industries Sub-Committee, established to investigate the needs of civil and non-essential Industries for those materials controlled as a measure of War necessity by the War Supply Departments.

In spite of its extensive organisation the War Priorities Committee is in no sense an executive body. All its efforts have been directed towards bringing competing Departments into close contact, thereby affording them a better opportunity for realising the necessity for give and take if the War machine were to be kept going as a whole. The working of the Committee has been successful and where references of inter-departmental differences had been frequent before the establishment of the Committee and in the early days of its existence, they were few and far between throughout 1918. It may, in fact, be said that the result of the Committee's activities has been to attain many of the advantages which are claimed for a single supply department.

### **Eastern Committee.**

The *Eastern Committee* was established in March, 1918, to take over the work formerly dealt with by two Committees known respectively as the Persia Committee and the Middle East Committee. The Eastern Committee dealt with the multifarious problems that arose between the Eastern shores of the Mediterranean and the frontiers of India. It co-ordinated the military and diplomatic policy in Palestine, Syria, Mesopotamia, Persia, the Caucasus, Transcaspia, Central Asia, etc. It provided facilities for conference where could be concerted the action of the Departments concerned in this vast region, namely, the Foreign Office, India Office, War Office, Admiralty and other Departments, such as the Ministry of Shipping and the Treasury, which might from time to time be concerned in the particular questions that arose. The Eastern Committee consisted of:—

Lord Curzon, Chairman.

The Secretary of State for Foreign Affairs, or his Deputy.

The Secretary of State for India.

General Smuts.

The Chief of the Imperial General Staff.

Experts from the various Departments were constantly in attendance at the Committee. It held 48 meetings up till the end of the year 1918, and undertook the preparation of the case for the British Delegates at the Peace Conference in respect of the Middle East. Upon the opening of the Conference in January, 1919, when a portion of its work was transferred to Paris, the Committee in its original form was dissolved, but continues to meet as a Departmental Committee at the Foreign Office, under the Chairmanship of the Acting Secretary of State, where it discharges the same functions.

**Economic Defence and Development Committee.**

*The Economic Defence and Development Committee* was appointed by the War Cabinet on June 10th, 1918.

The Committee was given wide powers to deal within its discretion with any economic questions, and only referred to the War Cabinet such large questions of policy as required Cabinet sanction.

The Committee held regular weekly meetings, and was summoned more frequently when occasion arose.

The Committee was originally composed of :—

Mr. Chamberlain, Chairman.  
 Mr. Barnes.  
 The Minister of Reconstruction.  
 The President of the Board of Trade.  
 The Minister of Blockade (also representing the Foreign Office).  
 The Secretary of State for the Colonies.  
 The Secretary of State for India.  
 The Minister of Labour.  
 The Financial Secretary to the Treasury, and  
 Sir Alfred Mond.

Later, on August 14th, after Lord Robert Cecil had become Assistant Secretary of State for Foreign Affairs, it was considered desirable that the Ministry of Blockade should continue to be represented on the Committee, as well as the Foreign Office, and therefore the Minister of Blockade joined the Committee as an additional member.

**Committee of Home Affairs.**

In June, 1918, the War Cabinet decided to set up a Standing Cabinet Committee of Home Affairs to deal with questions of internal policy and such domestic questions as required the co-operation of more than one Department, or were of such importance that they would otherwise call for the consideration of the War Cabinet. The Committee was given a wide discretion in dealing with matters on which agreement was reached and which did not raise large political issues. The composition of the Committee was as follows :—

The Home Secretary, Chairman.  
 The President of the Board of Trade.  
 The President of the Local Government Board.  
 The Minister of Reconstruction.  
 The President of the Board of Education.  
 The Minister of Labour.  
 The Secretary for Scotland.  
 The Financial Secretary of the Treasury, and  
 One of the Law Officers of the Crown.



The Chairman was authorised to invite the attendance of other Ministers as occasion required. The main subjects which engaged the attention of the Committee were raised at the instance of the Local Government Board, the Board of Agriculture, the Ministries of Food, Labour, Pensions, and Reconstruction, and embraced problems of health, housing and education, wages and industrial conditions, pensions, and the supply and prices of food-stuffs.

### **The Demobilisation Committee.**

The Demobilisation Committee was appointed by the War Cabinet on the 30th October, 1918, and consisted of three members of the War Cabinet :—

General Smuts, Chairman.  
Mr. Chamberlain.  
Mr. Barnes,

who were given the authority and powers of the War Cabinet to dispose of demobilisation questions. This Committee held its first meeting on the 31st October, 1918, and sat almost daily until December 11th. A few days after General Smuts resigned from the War Cabinet and the Committee was dissolved, its place being taken by Sir Eric Geddes, who was appointed to take charge of the co-ordination of demobilisation and the rehabilitation of industry.

Some of the other Committees of the War Cabinet, which were originally established for the purpose of particular investigations, met so frequently and so continuously as to fall almost into the category of Standing Committees. Among these may be mentioned the Army and Navy Pay Committee which, under the Chairmanship of Mr. G. N. Barnes, carried out many detailed investigations on behalf of the War Cabinet on the subject of the pay and allowances of the Forces.

The practice of inviting experts to attend the meetings of the War Cabinet was continued. In the year 1918, 278 persons, other than members of the War Cabinet Secretariat, attended its meetings. These included experts in practically every branch of Government and administrative activity. The Secretary of State for Foreign Affairs, the First Sea Lord of the Admiralty, and the Chief of the Imperial General Staff continued to attend at every meeting to communicate the latest intelligence in regard to the War and to consult with the War Cabinet on questions that arose from day to day. The Chief of the Air Force also attended at frequent intervals for the same purpose. Under this system the War Cabinet held 187 meetings during the year 1918. Including the meetings of the Imperial War Cabinet the total reached 202 meetings. Since its formation in December, 1916, the War Cabinet has held 495 meetings; or, if the Imperial War Cabinet meetings are added, 524 meetings.

The Secretariat continued to perform the functions allotted to it as described in the previous Report. In addition it supplied the Secretariat for the Standing Committees mentioned above, for the Imperial War Cabinet, and for all or nearly all the Committees set up by the War Cabinet for special enquiries. It worked in close association with the Prime Minister's Secretariat.

## CHAPTER II.

**IMPERIAL AFFAIRS.****A. The Imperial War Cabinet.**

With every year that has passed the participation of the Empire as a whole in the war has become more complete and more intimate. In every sphere of war effort and sacrifice—in the raising and equipping of troops, in the furnishing and control of food-stuffs and raw materials, in the financing of their efforts by loan or taxation, in the cheerful acceptance of inevitable restrictions on the economic life of the individual and the community—the various units which compose the British Commonwealth showed, in the past year, that their loyalty to the common cause and their determination to ensure its victory were only strengthened by the prolongation and the increasing cost of the struggle. Those efforts and sacrifices were crowned by the amazing series of victories won by British arms in the closing half of a year which deserves to rank with 1759 as *annus mirabilis*, a year of wonders. And in those victories the troops of every portion of the Empire played a conspicuous part. In the West, the forces of every British Dominion shared equally with the troops of the old Homeland and with our gallant Allies the glory of finally breaking down the resistance of the German Armies. In the East, General Allenby, with an army composed almost exclusively of the forces of the British Commonwealth, and, in very large measure, of Indian troops, achieved a success, more complete in the purely military sense than any other single victory in this war. Particulars of the military and economic effort of the different portions of the Empire, and of the part played by their forces in the various theatres of war will be found in the appropriate sections of this Report. It is enough here to note the truly Imperial character of the war as an external phenomenon in order to appreciate its inevitable effect upon the internal constitutional relations of the component parts of the British Commonwealth.

The common effort and sacrifice in the war have inevitably led to the recognition of an equality of status between the responsible Governments of the Empire. This equality has long been acknowledged in principle, and found its adequate expression in 1917 in the creation, or rather the natural coming into being, of the Imperial War Cabinet as an instrument for evolving a common Imperial policy in the conduct of the war. The nature of the constitutional development involved in the establishment, as a permanent institution, of the Imperial Cabinet system, was clearly explained by Sir Robert Borden in a speech to the Empire Parliamentary Association on the 21st June, 1918 :—

“ A very great step in the constitutional development of the Empire was taken last year by the Prime Minister when

he summoned the Prime Ministers of the Overseas Dominions to the Imperial War Cabinet. We meet there on terms of perfect equality. We meet as Prime Ministers of self-governing nations. We meet there under the leadership and the presidency of the Prime Minister of the United Kingdom. After all, my Lord Chancellor and Gentlemen, the British Empire, as it is at present constituted, is a very modern organisation. It is perfectly true that it is built up on the development of centuries, but, as it is constituted to-day, both in territory and in organisation, it is a relatively modern affair. Why, it is only 75 years since responsible government was granted to Canada. It is only a little more than fifty years since the first experiment in Federal Government,—in a Federal Constitution,—was undertaken in this Empire. And from that we went on, in 1871, to representation in negotiating our Commercial Treaties, in 1878, to complete fiscal autonomy, and after that to complete fiscal control and the negotiation of our own treaties. But we have always lacked the full status of nationhood, because you exercised here a so-called trusteeship, under which you undertook to deal with foreign relations on our behalf, and sometimes without consulting us very much. Well, that day has gone by. We come here, as we came last year, to deal with all these matters, upon terms of perfect equality with the Prime Minister of the United Kingdom and his colleagues. It has been said that the term 'Imperial War Cabinet' is a misnomer. The word 'Cabinet' is unknown to the law. The meaning of 'Cabinet' has developed from time to time. For my part I see no incongruity whatever in applying the term 'Cabinet' to the association of Prime Ministers and other Ministers who meet around a common council board to debate and to determine the various needs of the Empire. If I should attempt to describe it, I should say it is a Cabinet of Governments. Every Prime Minister who sits around that board is responsible to his own Parliament and to his own people; the conclusions of the War Cabinet can only be carried out by the Parliaments of the different nations of our Imperial Commonwealth. Thus, each Dominion, each nation, retains its perfect autonomy. I venture to believe, and I thus expressed myself last year, that in this may be found the genesis of a development in the constitutional relations of the Empire, which will form the basis of its unity in the years to come."

The second session of the Imperial War Cabinet opened on June 11th. The United Kingdom was represented by the Right Hon. D. Lloyd George, Prime Minister (in the Chair), by the members of the British War Cabinet, and by the Right. Hon. A. J. Balfour, the Secretary of State for Foreign Affairs, the Right Hon. W. Long, the Secretary of State for the Colonies,

the Right Hon. Viscount Milner, the Secretary of State for War, the Right Hon. Sir E. Geddes, the First Lord of the Admiralty, and the Right Hon. Lord Weir, the Secretary of State for the Royal Air Force. Canada was represented at the meetings by the Right Hon. Sir Robert Borden, Prime Minister, and by the Hon. N. W. Rowell, President of the Privy Council of Canada. Australia, which, owing to a general election, had been unable to send any representatives in 1917, was represented by the Right Hon. W. M. Hughes, Prime Minister, and by the Right Hon. Sir J. Cook, Minister of the Navy. New Zealand was again represented by the Right Hon. W. F. Massey, Prime Minister, and by the Right Hon. Sir J. G. Ward, Minister of Finance. South Africa was represented by Lieutenant-General the Right Hon. J. C. Smuts, Minister of Defence, and by the Hon. H. Burton, Minister of Railways and Harbours. Newfoundland by the Right Hon. W. F. Lloyd, Prime Minister. In the representation of India an important and significant change was introduced. Whereas at the previous session India had been represented by the Secretary of State for India, accompanied by three assessors, she was on this occasion represented by the Secretary of State for India, the Right Hon. E. S. Montagu, and the Hon. S. P. Sinha, Member of the Executive Council of the Governor of Bengal, who, in accordance with the statement of the Prime Minister in the House of Commons on May 17th, 1917, was deputed to this country as the representative of the people of India. The Maharaja of Patiala also attended the meetings as the spokesman of the Princes of India.

The second session of the Imperial War Cabinet coincided with the most critical phase of the military operations in the Western Theatre. When it opened the German offensive had just attained what was to prove its climax by the advance from the Chemin des Dames to the Marne. Everything depended on whether another German offensive succeeded in achieving a military decision during the two or three months before the emergency measures for bringing over the American Army and reinforcing the depleted British divisions could take effect. The offensive failed, and before the full session of the Imperial War Cabinet closed the great Allied counter-offensive was already in full progress. The deliberations of the Imperial War Cabinet are necessarily secret, but it is well-known that they were not confined to the all-absorbing military problems, but covered the whole field of Imperial policy, including many aspects of foreign policy and the war aims for which the British Commonwealth was fighting. It is worth noting, in this connection, that the Oversea members of the Imperial War Cabinet not only helped to settle the policy to be adopted by the British Government at the session of the Allied Supreme War Council at Versailles in July, but also attended one of the meetings of the Supreme War Council in person.

During this second session certain improvements were also introduced in the actual machinery of the Imperial War Cabinet

system. It was felt that the Dominion Prime Ministers should, as his colleagues on the Imperial War Cabinet, correspond directly with the Prime Minister of the United Kingdom whenever they wished to do so. The experience of the past year had also shown the practical inconvenience resulting from the fact that, while the Prime Ministers of the Dominions could only attend the Imperial War Cabinet for a few weeks in the year, matters of the greatest importance, from the point of view of the common interest, inevitably arose and had to be decided in the interval between the sessions. The natural remedy for this defect lay in giving the Imperial War Cabinet continuity by the presence in London of Oversea Cabinet Ministers definitely nominated to represent the Prime Ministers in their absence. The Imperial War Cabinet, consequently, on July 30th, accepted the following Resolution :—

- I. (1) The Prime Ministers of the Dominions, as members of The Imperial War Cabinet, have the right of direct communication with the Prime Minister of the United Kingdom, and *vice versa*.
  - (2) Such communications should be confined to questions of Cabinet importance. The Prime Ministers themselves are the judges of such questions.
  - (3) Telegraphic communications between the Prime Ministers should, as a rule, be conducted through the Colonial Office machinery, but this will not exclude the adoption of more direct means of communication in exceptional circumstances.
- II. In order to secure continuity in the work of the Imperial War Cabinet and a permanent means of consultation during the war on the more important questions of common interest, the Prime Minister of each Dominion has the right to nominate a Cabinet Minister either as a resident or visitor in London to represent him at meetings of the Imperial War Cabinet to be held regularly between the plenary sessions.

It was decided that arrangements should be made for the representation of India at those meetings.

After the close of the second session several meetings of the British War Cabinet were attended by such representatives of the Dominions as still remained in the United Kingdom, but before the arrangements contemplated in the second of the above Resolutions could take effect the rapid collapse of the Central Powers precipitated the whole question of the discussion of terms of peace. The moment this was realised the Dominion Prime Ministers were warned to be in readiness to come over in order to be in close touch, as members of the Imperial War Cabinet, with the whole situation, and to take part in the discussions between the Allies as to the peace settlement itself. The Viceroy

of India was also invited to send representatives to London for the same purpose.

By November 20th, 1918, the third Session of the Imperial War Cabinet had commenced the consideration of the many questions relating to the Peace Settlement. Before the end of the year not less than twelve meetings had been held, although it was not until December 18th that the numbers of the Imperial War Cabinet were completed, except for the representatives of New Zealand, by the arrival of General Botha, representing South Africa, and the Maharaja of Bikaner and Sir S. F. Sinha. Two of the most interesting of these meetings were held on the morning and afternoon of December 3rd, when the Imperial War Cabinet met M. Clemenceau and Marshal Foch, Representatives of France, and Signor Orlando and Baron Sonnino, Representatives of Italy, who had arrived in London for an important Conference. Important meetings were also held before and after Christmas, at the time of President Wilson's visit. Thus the year 1918, which had confronted the Imperial War Cabinet with so many anxious and critical war problems, left them at its close engaged on the scarcely less difficult, but certainly less anxious, questions of the Peace Settlement.

### **B. Imperial War Conference.**

In 1918, as in 1917, an Imperial War Conference was held in London concurrently with the meetings of the Imperial War Cabinet, under the Chairmanship of the Secretary of State for the Colonies. This Conference was, for the first time, fully representative of all parts of the Empire, since members from Australia, who had been unavoidably absent in 1917, were present as well as Ministers from all the other self-governing Dominions and India.

A great part of the deliberations of the Conference was of a confidential nature and entirely unsuitable for publication—at any rate during the war, but it was found possible to publish (Cd. 9177) a certain part of the discussions, and the great majority of the Resolutions passed.

Of these Resolutions, the most important dealt with the future economic policy of the Empire with regard to raw materials. The acceptance by the British Government in 1917 of the principle of preference had removed a subject which had been a prominent feature at previous conferences. The greater part of the economic discussions, therefore, which were of an eminently practical character, centred about the economic problems which arose out of the war. It was agreed that it was necessary for the British Empire and the belligerent Allies to secure the command of certain essential raw materials in order to enable them to repair the effects of the war as soon as possible and to safeguard their industrial requirements. The opinion was expressed that the Governments of the British Empire should make such arrangements amongst themselves as would ensure that essential raw

materials produced within the Empire should be available for the purposes described, and should arrange with the Allied countries to utilise for the same purpose essential raw materials produced in those countries.

Before the Conference separated the first steps were taken for practical action in this direction. A Committee of the Conference was appointed to investigate further the particular raw materials determined by the Conference as suitable for post-war control. This Committee's report was approved by the Conference, and it was laid down that the Governments represented should forthwith consult with the representatives of the producers and trades concerned as to the method of obtaining control best suited to each individual commodity.

Other economic matters considered by the Conference were the non-ferrous metal industry, petroleum, dyes, the creation of an Imperial Mineral Resources Bureau (a matter which had already been considered at the Conference of the previous year) and post-war supervision of shipping.

As to the latter, a Resolution was passed to the effect that the Conference accepted in principle the establishment of an Imperial Investigation Board to review shipping on the principal routes, to enquire into and report on all matters connected with ocean freights and facilities, and to consider the development and improvement of the sea communications between the different parts of the Empire, with particular reference to the size and type of ships and the capacities of harbours.

The question of communications within the Empire other than shipping also engaged the attention of the Conference, and Resolutions were passed dealing with an Imperial News Service, Cable Communications and Inter-Imperial Parcels Delivery. Of these the first stated that the Conference was impressed with the importance of securing an adequate News Service, supplied from British sources, to be available in all parts of the Empire, and requested His Majesty's Government to formulate a scheme with this object in view. The second laid it down that it was in the highest interests of the United Kingdom and the various oversea Dominions, and laid stress on the desirability of the co-operation of the various Governments in the provision of a State-owned cable across the Atlantic. The third recommended that the existing facilities for Inter-Imperial Parcels Delivery should be enlarged, improved and co-ordinated, and recommended the preparation of a detailed scheme for this purpose.

The Conference of 1917 had accepted the principle of reciprocity of treatment between India and the Dominions in the matter of immigration. In 1918 a further resolution was passed elaborating the principle already laid down. The resolution read as follows :—

1. It is an inherent function of the Governments of the several communities of the British Commonwealth, including India, that each should enjoy complete control of the composition of its own



population by means of restriction on immigration from any of the other communities.

2. British citizens domiciled in any British country, including India, should be admitted into any other British country for visits, for the purpose of pleasure or commerce, including temporary residence for the purpose of education. The conditions of such visits should be regulated on the principle of reciprocity, as follows :—

- (a) The right of the Government of India is recognised to enact laws which shall have the effect of subjecting British citizens domiciled in any other British country to the same conditions in visiting India as those imposed on Indians desiring to visit such country.
- (b) Such right of visit or temporary residence shall, in each individual case, be embodied in a passport or written permit, issued by the country of domicile, and subject to *visé* there by an officer appointed by, and acting on behalf of, the country to be visited, if such country so desires.
- (c) Such right shall not extend to a visit or temporary residence for labour purposes or to permanent settlement.

3. Indians already permanently domiciled in the other British countries should be allowed to bring in their wives and minor children on condition (a) that not more than one wife and her children shall be admitted for each such Indian, and (b) that each individual so admitted shall be certified by the Government of India as being the lawful wife or child of such Indian.

Important resolutions were also passed approving of the cutting down of inter-Imperial telegraphic rates, the revision of our naturalisation laws, and last, but not least, the establishment of a single Imperial Court of Appeal to replace the present dual system by which British appeals go to the House of Lords and appeals from the rest of the Empire to the Judicial Committee of the Privy Council.

### **C. Constitutional Development in India.**

The outstanding event of the year 1918 in the political history of India was the publication at the beginning of July of the joint Report (Blue Book Cd. 9109) by the Secretary of State for India, Mr. E. S. Montagu, and the Governor-General, Lord Chelmsford, on Indian Constitutional Reform. The Report, both on account of the importance of the subject, the interest of its contents, and the far reaching character of its recommendations, will rank among the great State papers that mark the constitutional evolution of the British Empire. The Report, which relates to all the provinces of British India but reserves the case of Burma for future consideration, embodies the results of a personal enquiry made by its authors in India during the winter and spring of 1917-18, as to the best method of

giving effect to the policy of His Majesty's Government, as announced by the Secretary of State in Parliament in the preceding August, namely, "Increasing association of Indians in every branch of the administration, and the gradual development of self-governing institutions, with a view to the progressive realisation of responsible government in India as an integral part of the British Empire." The inquiry was so conducted as to elicit opinions both of officials and, so far as possible, of all classes of the general population.

The recommendations of the joint Report affect all the three planes in which the administrative machinery of India operates, namely, the local Governments of the various provinces, the Government of India (or the Central Government of the Governor-General in Council), and the control of Parliament exercised through the Secretary of State. But it is in the first of these administrative divisions that the main lines of development advocated in the Report are centred, the purport of the recommendations being to introduce at once responsibility within provincial Governments in certain subjects, and by degrees to extend it, as conditions permit, to all branches of the provincial administration.

The scheme which has been designed with this object in view has the following main features. The introduction of responsible government in the provinces involves as a condition the setting free of their Governments to the greatest possible extent from control by superior authority, and the devolution of powers hitherto retained in the hands of the Government of India. Some progress in this direction has resulted from the recommendations of the Royal Commission on Decentralisation; but the framers of the Report have approached the matter from a new standpoint, and their recommendations postulate not merely vitalising and clothing with increased authority the various self-governing institutions in the provinces, but a much greater approach to autonomy than has been previously contemplated for the provincial governments themselves. The financial control exercised by the Government of India over the provincial Governments will be relaxed by revising the existing arrangements under which the Central Government, after dividing between itself and the provinces on the basis of their estimated needs certain heads of revenue, has the disposal of the surplus. In place of this arrangement there will be an entire separation of the resources of the Central and Local Governments. In matters of administration, the control at present exercised by the Government of India will be substantially relaxed, while the legislative activity and supervision of the Central legislature will be confined more closely than in the past to matters of general concern to the country as a whole. The Governments of the major provinces, being thus ensured a large measure of independence in local affairs, will themselves be reconstituted. It is proposed that the system of Council Government, as opposed to administration by a single head (which at present obtains in four of the seven major provinces), should be extended to all seven provinces, and that this system itself should be developed

on new lines. On this head the recommendations of the Report are novel and important. The problem presented two possible alternatives—to confer upon a popularly elected chamber a large but ill-defined measure of control over all matters that are the concern of Government, or to divide the administrative sphere into two sections or groups of subjects, designated respectively “reserved” and “transferred,” and to confer upon the chamber full responsibility in respect of the latter group, while reserving to the Governor and his Executive full responsibility in respect of the “reserved” group. The Report has chosen the latter alternative, as offering the simpler and safer method of advance, for, by the simple expedient of adding to the number of the subjects “transferred” to popular control, the area of responsible government in the provinces can be enlarged to any desired extent, even to the point when nothing would remain “reserved” from such control.

The scheme involves the formation in each of the major provinces of a composite Government, consisting of a Governor working on the one hand with a nominated Executive Council to control the “reserved” subjects, and on the other hand with one or more Ministers selected by the Governor from the elected members of the provincial legislature to control the “transferred” subjects. It is contemplated that while this Government would commonly deliberate as a whole, and while all orders issued will be issued in the name of the local Government, decisions on the “reserved” subjects should be taken by the Governor in his Executive Council, and decisions on “transferred” subjects by the Governor acting in consultation with his Minister. It is not proposed that the Ministers appointed by the Governor should for the present be amenable directly to the will of the legislature. Subject to the right of the Government to require a Minister to resign, he would hold office for the life of the Legislative Council. But a hope is expressed in the Report that after the new Legislative Councils have been at work for five years, the result of their working may have been such as to justify the salaries of Ministers being made dependent on the annual vote of the provincial legislature.

In the constitution of provincial legislatures considerable modifications are contemplated. It is proposed that in every such legislature there should be a substantial elected majority, the official element being reduced to the lowest limit compatible with the efficient discharge of public business. The franchise will be broadened and the electorate increased in order to make these assemblies as representative as possible. In the legislative as well as in the executive sphere the demarcation of subjects into “reserved” and “transferred” categories will give the popular element in the Councils a real control over measures relating to the latter class, while a radical alteration of the budget procedure will give it a similar control over supplies for such measures. The Legislature will also have ample opportunities for exerting its influence over “reserved” measures and supplies for “reserved” services, though provision will be made

for safeguarding the ultimate responsibility to Parliament of the Governor and his Executive Council for the peace and order of the province. The Report proposes that the Governor should be empowered to certify any measure where there is a conflict between the Governor and the Chamber, and to refer it for decision to a Committee of the Council on which he will nominate a bare majority. Similarly, the Governor will be given power to overrule an adverse vote on supplies for "reserved" services when such supplies are in his opinion essential to the discharge of his responsibility.

In the constitution of the Executive of the Central Government (otherwise the Government of India) no change is contemplated other than an increase in the number of Indian members in the Executive Council. But the Indian Legislative Assembly, which at present consists of a single chamber with an official majority, will be reconstituted into two chambers, the upper containing a bare official majority and the lower a large elected majority. Although normally all legislative measures will depend for their authority on their acceptance by a majority of both houses, or (in case of difference of opinion) on the decision of a joint session of both houses, the Government of India will have power to refer any measure, the passage of which they regard as essential to the discharge of their responsibilities, to the final decision of the upper chamber alone.

Although, as has been indicated, some of the main difficulties with which the framers of the Report were faced arose out of the necessity for safeguarding, along with the development of popular responsibility, the ultimate authority of Parliament as exercised through the Secretary of State for India in Council, they foresaw that the realisation of their proposals would necessarily involve some relaxation of Parliamentary and India Office control. It would clearly be impossible to charge a provincial Government with the administration of certain matters in accordance with the declared wishes of an elected legislature, and at the same time to hold it in the last resort responsible in respect of those same matters to the Secretary of State and Parliament. The precise manner in which, and the extent to which, this relaxation should be effected will form the subject of an enquiry by a Committee in London. During the winter of 1918-19, two Committees have conducted enquiry into the details of the franchise and electorates for the new Councils, and into the question of the demarcation of subjects between the "transferred" and "reserved" groups. Until the recommendations of these three Committees are received, the framework of the Report cannot be regarded as complete, and the legislation which will be required to give effect to its recommendations cannot be definitely framed.

The recommendations of the Montagu-Chelmsford Report, however, are essentially progressive in character, and it accordingly recommends that after the constitutional changes proposed in it have been effected, the progress made should be examined periodically by a Parliamentary Commission, and

responsible government developed by successive stages in each province in accordance with the findings of the Commission. It is contemplated that the Commission should survey the whole field of Indian affairs, including the many important matters, such as the employment of Indians in the public services, the spread of education and the development of industries, that are touched upon in greater or less detail in the Report.

While the Report deals primarily with British India, its framers have not lost sight of the fact that the changes they advocate must react on the Native States. Their proposals therefore include provision for closer association between the Government of India and the Rulers of States who enjoy full powers of internal administration, and for the institution of a permanent consultative body of the nature of a Council of Princes, over which the Viceroy should as a rule preside. There is no intention as the result of these proposals to introduce any radical alteration in the relations between the Government and the Rulers of Native States, and still less to alter the system of internal administration in the States themselves. The proposals are designed to afford facilities which many States will welcome for associating themselves with the solution of problems affecting India as a whole, but to leave them the same freedom of internal administration as they enjoy at present.

The conception of the framers of the Report of the eventual future of India under their scheme may be described in their own words as being that of "a sisterhood of States, self-governing in all matters of purely local or provincial interest, in some cases corresponding to existing provinces, in others perhaps modified in area according to the character and economic interests of their people. Over this congeries of States would preside a central Government, increasingly representative of and responsible to the people of all of them; dealing with matters, both internal and external, of common interest to the whole of India; acting as arbiter in inter-state relations, and representing the interests of all India on equal terms with the self-governing units of the British Empire. In this picture there is a place also for the Native States."

It was stated by Mr. Montagu in the House of Commons on 14th June that, owing to their heavy preoccupation with the war, His Majesty's Government had not been able to formulate their conclusions on the Report, but had decided to present it to Parliament to afford the promised opportunity for public discussion, and to obtain for themselves the advantage of considering any suggestions to which its publication might give rise.

In India the publication of the Report aroused the liveliest interest. In view of the nature of its recommendations they naturally evoked considerable difference of opinion among the Indian public. A section of opinion maintained with some vehemence that they are inadequate and fail to satisfy popular aspirations and national desires, while by some classes they are viewed as an experiment for which the country

is not ripe. The Report has, however, been welcomed by a growing volume of moderate opinion, though the majority of its supporters insist that an essential condition for the success of the scheme is that it should be brought into effect without undue delay or material curtailment.

## CHAPTER III.

**INTER-ALLIED ORGANISATIONS.****A. Supreme War Council.**

As stated in the Report for 1917, a very important advance was made in November of that year in the sphere of inter-allied co-operation. The agreement for the creation of the Supreme War Council which was arrived at at Rapallo in 1917, provided that it should consist of two representatives from each country—the Prime Minister and one other Minister of Cabinet rank. It was thus primarily a political and not a military body, its object being to secure such adjustment and co-ordination of national policies as would make possible the execution of a single comprehensive, strategic plan of allied operations. The working out of the military aspects of the strategic plan was assigned to four permanent Military Representatives, who were to have at their disposal both the information in possession of, and the separate plans put forward by, the several national General Staffs. Other advisers on the various technical aspects of the war were called in as required. It was contemplated that the Political Council should meet, if possible, at least once every month, but that the permanent Military Representatives should remain in continual session. ✓

The first session of the Council took place at Rapallo on November 7th, 1917, and was attended by Ministers and military experts of Great Britain, France and Italy. Later, the United States signified their concurrence in the formation of the Council and appointed their Chief of Staff as the American Military Representative. The Head of the United States Government, however, was obviously not in a position himself to become an active member of the Council, nor, at first, did he consider it desirable to delegate a political representative to attend its meetings.

By mutual agreement between the Associated Governments it was decided that permanent military staffs should be established at Versailles, where the majority of the sessions took place. It was, however, further agreed that the Council could also meet elsewhere as found most convenient, and, in fact, it has met at London and other places.

The second session was held at Versailles on December 1st, and was attended by Ministers of the three Allied Governments with their military staffs and also by the American military representative. At this session a number of resolutions were passed in regard to the functions of the Supreme War Council and the supply of information to the military representatives of the Associated Governments; and the permanent secretarial staffs of the respective countries were instructed to organise, in concert, a joint secretarial bureau for the production and

distribution of the notices, agenda, protocols and procès-verbaux of the meetings of the Supreme War Council, and of such other collective business it might be found desirable to entrust to it. The military staff and secretariat of the British Section were the first to take up their quarters and duties at Versailles, *viz.*, on 27th November, 1917, one of the Assistant Secretaries of the War Cabinet being appointed Secretary to the Section. The secretarial business of the second session was conducted on lines identical with those which it had been convenient to follow in the case of meetings of the War Cabinet. This procedure, with certain modifications, was eventually adopted by the Supreme War Council.

The third session was held at Versailles from 30th January to 2nd February, 1918. The following important resolution, among others, was passed. The Council decided on the "creation of a General Reserve for the whole of the armies on the Western, Italian and Balkan Fronts," and delegated "to an Executive, composed of the permanent military representatives of Great Britain, Italy and the United States of America, with Marshal Foch for France," certain powers in regard to the General Reserve to be exercised in consultation with the Commander-in-Chief of the armies concerned. The Executive Committee, which was afterwards called the Executive War Board of the Supreme War Council, met on eight occasions, at each of which Marshal Foch presided, to discuss the composition and location of the General Reserve. For various reasons, however, no complete agreement had been arrived at by the fourth session of the Council which took place in London on the 14th March and following days. On the 21st March the Germans, after most careful preparations, began an attack on the British on a vast scale with 95 divisions on a front of 50 miles. The attack was successful in effecting a breach of the front and there was a very considerable withdrawal of British troops. The situation being extremely critical, Lord Milner, as Secretary of State for War, was sent over by the British Government to Compiègne to ascertain exactly what the situation was and to confer with the French and British Commanders as to the best method of effecting unity of command. He attended an important Conference at Doullens on the 26th March, when it was decided, with the full consent of the Generals present, that Marshal Foch should be appointed to co-ordinate the efforts of the British and French armies. This appointment deprived the Executive War Board of its *raison d'être*, and it was accordingly dissolved by resolution of the fifth session of the Supreme War Council, which was held at Abbeville on the 1st and 2nd May, 1918. Shortly afterwards Marshal Foch was given the title of Commander-in-Chief of the Allied Forces on the Western Front.

At the fifth session of the Supreme War Cabinet it was decided that the powers of co-ordination conferred by the "Doullens Agreement" on Marshal Foch should be extended to the Italian front, that is to say, if the Allied Armies should both



in France and Italy become involved in a general action, Marshal Foch should be the Commander-in-Chief of the whole front from the North Sea to the Adriatic, subject to the proviso that the Commander-in-Chief of any one of the Allied Armies would have the right to appeal to his own Government if he considered that the safety of his Army was compromised by any order received from the General-in-Chief.

The sixth and seventh sessions of the Council were held at Versailles from 1st to 3rd June and from 2nd to 4th July, respectively, and dealt with the pressing necessities of that critical military period. As already mentioned in the chapter on Imperial Affairs, the latter meeting was attended by the representatives of the Dominions and India on the Imperial War Cabinet.

The eighth session of the Supreme War Council was held in Paris and Versailles from 31st October to 4th November, when the conditions of the Armistice with the Central Powers were drawn up and approved. This meeting was attended for the first time by a political representative of the United States of America.

The permanent Military Representatives held altogether 51 meetings from the date of creation of the Supreme War Council up to the last meeting held in 1918, which took place on the 12th November—the day after the signing of the Armistice. The subjects of discussion were remitted to the Military Representatives in one or other of the following ways :—

- (1) The Supreme War Council might at one of its meetings refer questions to the Military Representatives for examination and an expression of their views.
- (2) Any Military Representative might summon a meeting at any time to discuss questions referred to the Military Representatives by any Allied Government.
- (3) Any Military Representative might summon a meeting to consider a question which he wished to raise on his own initiative.

As regards the minutes and records of meetings, the procedure was identical with that obtaining in the case of the Supreme War Council, except that four copies of the minutes prepared by the Secretary of the day in his own language were signed by each Military Representative, one of these being retained as the official text in each of the four sections. In the ordinary course the recommendations or decisions of the Military Representatives were embodied in "Joint Notes" to the Supreme War Council, and copies of these Notes were forwarded by the Secretaries to the Heads of their respective Governments. When inviting attention of other Departments or Commanders-in-Chief the recommendations took the form of "Joint Questionnaires" or Resolutions. Joint Notes were usually considered at the following session of the Supreme War Council, and were accepted in their original or amended form, or rejected, as the case might be. In all, 40 Joint Notes were submitted during the course of the year.

The Notes embodied the results of an immense amount of Staff work at Versailles. The British Section, in particular, was early constituted, and in conjunction with the other sections worked out and foretold in January both the dimensions and the direction of the great German attack which took place in March with an accuracy which was subsequently specially singled out for acknowledgment by the Prime Minister.

Connected with the Versailles organisation and dependent on the Military Representatives were the Inter-Allied Technical Committees on Aviation and Tanks. These Committees, besides affording opportunities for interchange of views on the organisation and development of these more modern branches of military science, also acted as first-hand technical advisers on subjects either referred to them by the Military Representatives or initiated by themselves. Their recommendations were either embodied in the Joint Notes submitted to the Supreme War Council or were forwarded to the authorities concerned.

The Inter-Allied Transportation Council, though as an executive body not dependent on the Military Representatives, acted in an advisory capacity to them in supplying information regarding transportation problems confronting both the Allies and the Central Powers.

A Naval Liaison Committee constituted the necessary link between the Military Representatives and the Inter-Allied Naval Council sitting in London.

### **B. Inter-Allied Councils.**

In the War Cabinet Report for the year 1917 an account was given of the functions of the inter-Allied bodies which were in existence during that period. At the end of the chapter on that subject it was mentioned that proposals were then under consideration for the establishment of an Inter-Allied Council to advise on questions of transport. These proposals were carried into effect in the establishment early in 1918 of the Allied Maritime Transport Council, whose first session was held in London in March.

The Council consisted of two Ministers each of France, Italy and Great Britain, and two representatives of the United States of America. The purpose of the Council was to supervise the general conduct of Allied transport, in order to obtain the most effective use of tonnage for the prosecution of the war, while leaving each nation responsible for the management of the tonnage under its own control.

With this object the Council secured the necessary exchange of information, and co-ordinated the policy and action of the four Governments of France, Italy, the United States of America, and Great Britain in adjusting their programmes of imports to the carrying capacity of the available Allied tonnage (having

regard to naval and military requirements) and in making the most advantageous allocation and disposition of such tonnage in accordance with the urgency of war needs.

The Council had at its service a permanent organisation consisting of four sections (French, Italian, American and British), the head of the British Section being Secretary to the Council. The Council obtained through its permanent staff the programmes of import requirements for each of the main classes of essential imports, and full statements as to the tonnage available to the respective Governments. It examined the import programmes in relation to the carrying power of the available tonnage in order to ascertain the extent of any deficit, and considered the means whereby such a deficit might be met, whether by a reduction in the import programmes, by the acquisition, if practicable, of further tonnage for importing work, or by the more economical and co-operative use of the tonnage already available.

The members of the Council reported to their respective Governments, with a view to securing that the decisions and action required to give effect to any recommendations made by the Council were taken in their respective countries.

The work of the four National Sections was co-ordinated by one main Executive Committee, known as the Executive of the Council, and by two sub-committees :—

- (a) Tonnage Sub-Committee ;
- (b) Imports Sub-Committee.

These sub-committees reported to the Executive.

At a meeting held at Paris in April, 1918, the Transport Council recommended that Inter-Allied Programme Committees should be constituted for the purpose of framing Import Programmes to cover the whole range of imported commodities, which should be jointly agreed after effective inter-Allied criticism.

The following Councils and Committees were formed :—

1. *The Food Council,*

which co-ordinated Committees or Executives on wheat, meats and fats ; oil seeds ; sugar.

2. *The Munitions Council,*

which co-ordinated Committees on nitrates ; aircraft ; chemicals ; explosives ; non-ferrous metals, mechanical transports ; steel.

3. *Programme Committees on*

wool ; cotton ; hides and leather ; tobacco ; paper ; timber ; petroleum (a sub-committee of the Petroleum Conference) ; flax ; hemp and jute ; coal and coke.

These bodies prepared programmes of importation, and their functions included the adjustment of their programmes as the situation changed and the making of arrangements with the Transport Council for their execution.

With the exception of the Munitions Council, whose principal headquarters were in Paris, all these Committees had their headquarters in London.

The Transport Council was in close relationship with other bodies of an inter-Allied nature :—

- (a) Communication with the Supreme War Council was maintained through the War Cabinet Secretariat. Copies of all the Reports and Minutes of the Transport Council were in this way forwarded to Versailles. In one instance, namely, in regard to the allocation of Dutch Shipping in American ports, the Transport Council referred the question to the Supreme War Council.
- (b) In matters of common interest such as the demands of the Allied Navies upon mercantile tonnage, the Transport Council was in touch with the Allied Naval Council.
- (c) Close co-operation was maintained between the Transport Council and the Inter-Allied Council on War Purchases and Finance; a Liaison Officer was appointed and communications were interchanged relating to the classification of imports, programmes proposed and actual purchases. Copies of statements as to shipping on the one hand and as to purchases on the other were exchanged between the two organisations.
- (d) The Transport Council was also in touch, by means of a Liaison Officer, with the Commission Internationale de Ravitaillement, whose functions were described in the War Cabinet Report of 1917.

Thus, under the stress of war, there was developed an elaborate Inter-Allied machinery for controlling Imports, based on the shortage of shipping. In relation to the Transport Council the main function of this organisation of Councils, Executives, and Programme Committees was to furnish expert advice with a view to securing the most economical and advantageous employment of shipping in the interest of the Allied cause. The collection by this means of central information as to the import requirements of the Allies and as to the sources of supply led to the more profitable use of tonnage and to such adjustment of Allied needs to the available tonnage as best conduced to the successful prosecution of the war.

The Council first met on March 11th, 1918, and hostilities ceased on November 11th, 1918. This brief period of exactly eight months witnessed the complete transformation of all Allied Maritime transport and supply arrangements, and may be here briefly summarised.

A *new organisation* covering the whole range of imported commodities was built up and got into working order. Apart from the Allied Maritime Transport Council itself, the Inter-Allied Munitions Council and the Inter-Allied Food Council (each with its own permanent organisation), 20 programme committees were established. The effect of their work on the actual execution of Allied programmes is shown in the following paragraphs.

*Italian Coal.*—At the beginning of the period Italy's coal position was desperate. Her imports during 1917 averaged only about 440,000 tons a month against a consumption of about 600,000, with the consequence that her stocks were exhausted. There was no Allied obligation for any part of her supply except for the provision of 50,000 tons a month by Great Britain. A programme of 600,000 tons was agreed upon at the first meeting of the Council and was carried out throughout the period within an almost negligible margin of deficiency.

*French Coal.*—*The French coal* position was rendered equally serious by the German successes of the spring, which greatly reduced the output of the Pas de Calais mines. This problem was also dealt with. Difficulties arose through shortage of coal and congestion of ports, but as far as ships were concerned (with which alone the Council could deal) practically all that could be usefully employed were supplied.

*Allied Food.*—The supplies of food, again, to both France and Italy were last year in a most unsatisfactory position, and indeed both they and this country were in a serious danger last winter of famine in the spring of 1918. The position was retrieved by the summer of this year, and by the end of the cereal year tonnage had been arranged for all three countries on an agreed repartition programme for the most essential food, i.e., breadstuffs and cereals generally. From the beginning of the new cereal year the same principle was applied to all food (meat, sugar, oil-seeds, &c.) and was worked to very closely.

*Allied Munitions.*—The tonnage arrangements for Allied munitions were also in a dangerous position in the winter of last year, the Italian position being almost desperate after the losses of Caporetto. This position was also retrieved, and the munitions programme of the Allies was in the autumn of 1918 commenced on the same basis of equality as the food programme. The new system had not got into full working order for munitions when hostilities ceased, but in the meantime all the tonnage asked for had been supplied.

*Raw Materials.*—Considerable assistance was also given to French and Italian raw materials, though the examination of the programmes by the Programme Committees had not proceeded far enough for the principle of automatic allocation of tonnage in accordance with them to be applied. Raw materials outside the munitions programme were, however, a very small proportion of the imports dealt with under the arrangements described above for food and munitions (amounting, for instance, to less than one-thirtieth in the case of Italy).

The general position, therefore, was that the import services of France and Italy were in 1918 put upon a substantially satisfactory and a substantially equal basis. This was effected in a period when the stringency of the general tonnage situation was continually increasing, the European Allies having in the cereal year 1917-18 lost about 2,000,000 tons dead weight more than they built and the American excess of building over losses being much less than the additional demands of the increased American military programme. In addition, the Executive of the Council dealt with the Belgian Relief requirements, assisted the American Military Programme, directed the employment of over 500,000 tons dead weight of neutral pool tonnage, and effected a number of detailed economies and advantageous interchanges of tonnage.

Inter-Allied machinery was also employed in three other important cases, namely, the entry of Greece into the military operations in the Balkans; the re-allocation of supplies that had been ear-marked for Russian use; and the restoration of Industry and Agriculture in Belgium and other occupied territories.

As regards the mobilisation of the Greek Army, a Conference was held at Paris in September, 1917, with the object of allocating the responsibility for the necessary supplies between France, Great Britain and the United States. The original programme of mobilisation was subsequently modified by conferences in London between representatives of the Governments concerned, who established an Inter-Allied Commission at Athens, for the purpose of reporting as to the progress of mobilisation, and another at Salonica to ensure close co-operation between the French and British Governments in regard to supplies required for the Serbian Army.

In the case of Russia, care was taken to ensure that the disappearance of Russia from the ranks of belligerent powers did not involve any wastage of the supplies which had been allocated in such large quantities for Russian use. The establishment, under the Commission Internationale de Ravitaillement, of the Russian Liquidation Committee enabled the Allies to utilise, with the least possible delay, material which would otherwise have been wasted or lain idle.

As regards the restoration of industry and agriculture in those districts which have been liberated from the German yoke, the establishment of the Inter-Allied Commission for the Industrial and Agricultural Reconstruction of Belgium may serve as a model for the formation of similar organisations in regard to the restoration of other devastated territories.

## CHAPTER IV.

**EXTERNAL RELATIONS.****A. British and Allied Policy.**

The main events of the year, the great German offensives of March and June, the turn of the tide, the beginning of the German retreat on July 28th, the collapse of Bulgaria, Turkey, Austria-Hungary and finally of Germany herself, the abdication of King Ferdinand, the Emperor Karl and the Kaiser, and the Armistice of November 11th are well known. This chapter will rather be concerned with political and diplomatic events outside the fundamental stream of the war.

The first of these was the opening of informal peace negotiations between Germany and Roumania at the end of February following the advance of the German armies into that country. As a result, the Treaty of Bucharest was signed on May 7th. The terms of this Treaty were of an extreme severity. Germany aimed at a complete break-up of the Roumanian State and at securing for herself and her Allies complete control of all important Roumanian industries as well as of the ports and communications *via* the Danube. On May 19th the Allied Governments informed the Roumanian Government that they did not accept the terms of this Treaty.

A second feature of supreme importance during the year was the action of the subject races of Austria-Hungary and their gradual advance towards the ultimate realisation of their long-cherished aims. The achievements of the Czecho-Slovaks in Russia are recounted below. The aims of the Czecho-Slovak nation were emphasised at the Congress of Oppressed Nationalities at Rome which opened on April 8th. This Congress was attended also by Polish and Yugo-Slav representatives, and the general result was to emphasise before the world the respective claims of these nationalities. On June 3rd the Prime Ministers of Great Britain, France and Italy, at Versailles, issued a declaration favourable to the national aspirations of the Poles, Czecho-Slovaks and Yugo-Slavs. Later in the year the Czecho-Slovaks were recognised as Allies, and on September 13th the Prime Minister telegraphed to Professor Mazaryk, congratulating him on the victories of the Czecho-Slovak troops in Russia. The collapse of Germany and Austria-Hungary rendered it possible for the ambitions of these long oppressed nationalities to be realised at last, and one of the main tasks of the Peace Conference is to lay the foundations of the future Polish, Czecho-Slovak and Yugo-Slav States.

The events of the year in Russia are extremely complicated and difficult to follow, and deserve somewhat more lengthy treatment.



The year opened under the shadow of the German-Bolshevik peace negotiations, which began at Brest-Litovsk on December 22nd, 1917. The negotiations lasted throughout January, and the first definite result was reached on February 9th, when a Treaty of Peace was signed between Germany and the Ukraine, whose independence from Great Russia was recognised. In order to bring matters to a head, the Germans at the end of the month renewed their advance and occupied the whole of the Baltic Provinces. On the 3rd of March a precipitate peace, on German terms, was signed by the Soviet Government of Moscow. These Treaties were not recognised by the Allied Governments.

During the months that followed the chief German effort in Russia was directed towards the penetration of the Ukraine, from which Germany hoped to draw the supplies of food of which she stood in such great need, and the month of May saw German domination in Russia at its height. In March, Germany had intervened in Finland in the civil war fomented by the Russian Bolsheviks, and had helped the Finnish Government to crush the Red Guard insurgents, but at the same time had taken care, by a rigorous commercial treaty and by continued occupation in the interests of order, to bind Finland hand and foot to German interests and German policy. The German military command exerted every effort to re-organise the Finnish Army with a view to a Finnish-German northern offensive and the establishment of a submarine base on the coast, and in May and June this aim seemed to be within measurable distance of fulfilment. The presence of the German forces at Pskoff constituted a perpetual menace to Petrograd, and there is no doubt that the city could have been taken without difficulty at any moment had it suited German policy to make an advance upon it. In the Ukraine Germany had established a Government under General Skoropadski which was entirely subservient to her interests. In May, her troops reached Sebastopol, and the Black Sea became, like the Baltic, a German lake.

In Siberia the reaction against Bolshevism had not yet begun, and the dominant feature of the situation was the presence of thousands of German and Austrian prisoners of war, who, released by the Bolsheviks from any kind of interment or control, were rapidly organising themselves under their own officers and terrorising the country.

The position, therefore, which the Allied Governments had to face was difficult in the extreme. The danger of Russia falling entirely under the power of Germany was imminent, and it became clear that the Allies could no longer hold aloof. The Soviet Government professed anti-German sentiments, and for many weeks the Allied representatives at Moscow discussed the possibilities of Allied intervention in Russia with the consent and at the invitation of the Bolshevik authorities. The hostility of the Bolshevik authorities to what they called the bourgeois governments of the Allies, however, coupled with strong German influences in Moscow and elsewhere, were too strong, and, though the negotiations often seemed on the point of success, the invitation was never issued.

In June, however, hope appeared from another quarter. Siberia, the land of the peasant proprietor, had never been Bolshevik at heart, and it was here that the reaction started against Bolshevism. It was assisted by the presence of the Czecho-Slovak Army, which had maintained its organisation after the Russian collapse, and was encamped at different points along the Siberian railway. When the anti-Bolshevik movements in Siberia began, the Czecho-Slovaks became masters of many points on the railway as well as of the port of Vladivostock.

Nor was the reaction confined to Siberia alone. The assassination of Count Mirbach at Moscow, and of Field-Marshal von Eichorn at Kieff, both of which took place in July, were evidence of the unpopularity of the Germans in Russia. Early in July the threat of the establishment of a German submarine base on the Arctic had led to the landing of a small Allied force at Murmansk. At the beginning of August an anti-Bolshevik revolution occurred at Archangel, and a detachment of Allied forces from Murmansk occupied the town. Later in the month British, American, Japanese and other Allied contingents landed at Vladivostock for the purpose of protecting and supporting the Czecho-Slovak troops cut off in Siberia by re-opening the railway line between Western Siberia and the Pacific, which, at the time, was held by the Bolsheviks and German and Austrian prisoners of war.

During the latter part of the year, in addition to the independent anti-Bolshevik Governments in Archangel and in Siberia, the latter with its centre at Omsk, a third centre of the anti-Bolshevik parties in Russia was formed in the south by the remnant of General Alexieff's Cossack army, now under the command of General Denikin, which succeeded in rallying to its support the stable elements in the Don region, and also secured the ultimate adherence of the Kuban Cossacks. Eventually both General Denikin's Government and the Government of Archangel agreed to recognise the supremacy of the Government at Omsk, which thereafter claimed the title of an All-Russian Government, as representing the united forces of the Russian parties opposed to Bolshevism.

Before the German collapse in the West, therefore, German influence in Russia was already on the wane. The terms of the Armistice demanded that all German troops must be withdrawn from Russia "as soon as the Allies shall determine that the time has arrived, having regard to the internal situation of these territories." No opportunity was, however, given for the Allies to fix the date of the German withdrawal from Russia. The disintegrating forces of revolution had already acted on the German Army, and as soon as the Armistice was signed the retreat of the German troops from Russia began, accompanied in many cases by disorder, and could not be arrested by any action which their officers might take. Before the end of the year, though many isolated German detachments still remained on Russian territory, the German Army of occupation as an organised force had ceased to exist.

An agreement on commercial matters had been signed with Spain late in 1917 and worked well throughout the year, enabling the United Kingdom to draw much needed supplies of iron ore and other necessities. By August the persistent and wanton attack by German submarines upon Spanish shipping bore fruit, and on August 21st the Spanish Government published the Note addressed by them to the German Government a short time before, in which they protested in measured terms against the policy of outrage to which Spanish shipping was being subjected. Failing to obtain satisfaction, they finally proceeded to take possession of certain German ships in Spanish waters. The Associated Powers agreed to the temporary transfer of these vessels to Spain on the understanding that their final disposal should not be prejudiced thereby.

Among the noteworthy events in other parts of the world, allusion must be made to the successful tour of Sir M. de Bunsen in South America. This Mission was productive of most satisfactory results in establishing sounder relations with the countries visited and generally in making clear the aims of the Allied Powers in the war.

### **B. The Blockade.**

As was shown in the previous report, the entry of the United States into the war had already made an incalculable difference in blockade matters during 1917. The opening of the year 1918 found the pressure upon Germany steadily increasing in stringency, and in the course of the year the full effects of the American declaration of war were realised. The development of the blockade in 1918 simply put the finishing touches to what was already an extremely effective weapon.

The increased control of cereals, raw materials, fertilisers, fuel and transport placed the Associated Governments in a stronger position for negotiating with neutral countries contiguous to the enemy for the purpose of curtailing the home products passing from these countries to the enemy, and of reducing to a minimum the trade of the Central Empires with their immediate neighbours.

As early as October, 1917, the United States and the Allies, in the exercise of their sovereign rights, had prohibited the export from their territories and possessions to Scandinavia and Holland of all food, fodder, raw materials and manufactured articles, with very trifling exceptions in the nature of luxury articles and certain goods which Germany was herself exporting to those countries. It was impossible to prevent Scandinavia and Holland drawing goods from other neutral countries, since the prohibition of exports, known as "the general embargo," could not affect neutral countries. At the same time, however, the supplies which other neutral countries could provide were negligible, Spain being the only neutral source from which imports of any import-

ance could be obtained ; South American goods and Dutch East Indian products could not, in practice, reach Scandinavia and Holland owing to the fact that bunkering facilities, controlled by the Associated Powers, were refused to vessels carrying undesirable cargoes.

The "general embargo" was a measure applied to bring political pressure to bear upon the neutral countries, with a view to compelling them to cease exporting food and raw materials to the enemy and to make comprehensive commercial and tonnage agreements whereunder the neutrals, in exchange for the offer by the Associated countries of facilities for the import of essential raw materials and foodstuffs really required for use in their own countries, would, generally speaking, undertake to limit their exports to enemy destinations and to grant loans to enable the Associated Powers to purchase supplies in those neutral countries on more favourable terms than could otherwise be obtained under the much depreciated rates of exchange then ruling. In addition, these agreements contained clauses relating to the employment of the shipping of the country concerned. As a general rule, it was found possible to reach an agreement whereby, after sufficient tonnage had been left for the carriage of the rations provided for in the agreement, the remainder was placed at the disposal of the Associated Governments, for use partly within and partly without the war zone, on agreed terms as regards rates, insurance and bunker supplies.

The neutral tonnage engaged in the service of the Associated Governments included a large number of Dutch ships which were requisitioned by His Majesty's Government and the United States Government at the end of March. This step was necessitated by the extreme stringency of the shipping situation at the time. Proposals had been before the Netherlands Government for the greater part of the preceding year for an arrangement whereby the Dutch ships could be employed in Allied service, but an agreement was not reached, and no course was left except to requisition the ships. An arrangement satisfactory to all parties was subsequently made in regard to the terms on which the services of the vessels were taken.

Undeniably the results of the "general embargo" were even more effective than could have been reasonably anticipated. It was not expected that the neutral countries would long hesitate to conclude general agreements on the lines desired, but the series of apparent military successes achieved by the enemy during the first half of the year 1918 made the border neutrals hesitate long before entering upon agreements. Viewed solely from the blockade point of view, this delay was all to the good. Difficulty in obtaining tonnage and in moving ships, entirely due to the enemy's unrestricted submarine warfare, had resulted in comparatively small imports reaching Scandinavia and Holland during the year 1917. Holland and Denmark, to whom in particular Germany looked for the supply of agricultural produce of all kinds, *e.g.*, meat, pork, butter, cheese, condensed milk and

eggs, rely in the main upon imported fodder-stuffs to provide them with an exportable surplus of these commodities. The neutral countries contiguous to Germany began the experience of a general suspension of imports at an unfavourable moment; their accumulated supplies of goods were not as large as usual, and the winter, during which livestock are dependent so much upon concentrated fodder, was approaching. There followed a slaughtering of livestock upon an unprecedented scale; the livestock which was saved by the farmers in the hope that their Governments would soon conclude agreements under which imports of foodstuffs and fertilisers would shortly be renewed, suffered by being given "maintenance rations" rather than "fattening rations," so that the cattle were turned out to grass in a comparatively unfit condition and were unable to derive the full benefit from the pastures which they would otherwise have gained. Moreover, the grass season came later in 1918 than usual. The usual exportable surpluses of agricultural produce either disappeared entirely or dwindled to insignificant amounts.

The result of the measures taken by the Associated Powers was that Germany's larders over the border became, in 1918, nearly empty. Sweden, instead of having an exportable surplus of some 20,000 tons of butter, was actually competing in the Danish market against German purchasers. Dutch exports of butter, instead of being in the neighbourhood of 65,000 tons, fell to a quite inconsiderable figure. Germany, already suffering from a shortage of native pork, previously one of the staple articles of her dietary, was unable to look to the border neutrals for relief. The enemy's supply of fats, the shortage of which had for a considerable period caused her something more than inconvenience, now became more acute than ever.

In due course the neutrals concluded agreements with the Associated Powers. Norway and Sweden signed in May and June respectively; Denmark delayed until the beginning of October and Holland until November, approximately one year after the imposition of the "general embargo." The Norwegian and Swedish agreements were ominous for Germany, resulting as they did in an almost complete cessation of exports of food from those countries to the enemy and in a largely diminished supply of raw materials. By the time, however, that the two later agreements were concluded the Blockade had already achieved its purpose, the shortage of food and supplies contributing in a marked degree to Germany's overwhelming defeats upon the battlefield.

It will be interesting to read, when the time comes, the history of the Blockade written by the Germans, since it will furnish more complete information upon its strangling effect than can now be obtained. Whilst the Germans have an ulterior motive in declaring that the Blockade lost them the war, there is a very wide body of opinion among the British prisoners of war that as a military weapon the Blockade was unsurpassed. An

article issued early in 1919 in the "Kölnische Zeitung," based upon authoritative German statistics of births and deaths and of public health in Germany definitely attributed the final crumbling of the German Army to the undermining by the Blockade of the *morale* of the civilian population which dragged with it to its fall the fighting forces. Be that as it may, the statistics upon which the article in question was based stand on record as irrefutable proof that the Blockade acted with cumulative effect and more than justified itself as an extraordinarily powerful military weapon.

Towards the close of the year a new problem arose. As the advance of the Allied Armies into Belgium increased in rapidity, it became necessary to arrange measures of relief for the liberated areas. This task soon assumed vast proportions and by the date of the signature of the armistice the Associated Governments found themselves confronted with the duty of providing for the supply of the vital necessities of existence, firstly, in liberated territories such as Belgium, Northern France and Servia, secondly, in newly formed friendly states such as Yugo-Slavia, and thirdly, in the Central Empires themselves.

The connection of this task with the Blockade is clear. The control which had been set up and elaborated in the course of the last four years for the purpose of preventing the passage of supplies of any kind into the Central Empires had to be employed to regulate the world distribution of vital necessities and to secure that such provisions as were necessary and available for the three categories mentioned above should be properly distributed.

As the result of discussions between representatives of the Associated Governments it was finally decided to entrust this solution to a Supreme Council of Supply and Relief consisting of two representatives of each of the four Associated Powers. At the end of the year the Council was actively engaged in setting up the necessary organisation for carrying out this task and the despatch of Allied Missions to the areas affected was being arranged for. Measures were also being taken to secure the employment of as many German and Austrian vessels as possible to assist in the carriage of these relief supplies. Enemy vessels, both in home and neutral ports, were being manned and put into service for this purpose as rapidly as possible, it being clearly understood that any arrangement by which these vessels were placed under the control of any particular Power for this purpose was purely provisional and designed only to meet the immediate emergency.

### **C. Ministry of Information.**

In view of the great importance both at home and abroad of a more complete system of information regarding the causes of the war, and the naval, military and civil organisation

required for its successful prosecution, a Department of Information was formed early in 1917 to co-ordinate and extend the work which had been carried on independently by different branches of the administration. A further development was marked by the establishment, in March, 1918, of the Ministry of Information. The Ministry was concerned with publicity in neutral and allied countries and in the British Dominions, while the work in enemy countries was carried out by Lord Northcliffe's Committee at Crewe House, and that in Great Britain by the National War Aims Committee. But with both of these independent organisations the Ministry of Information maintained a close connection.

From the outset the Ministry paid special attention to organising the regular dissemination in foreign countries of reliable news of the military situation, and to making more widely known the reasons for which Great Britain entered upon the war, the aims which she was pursuing, and the extent of the British war effort. Daily reports were issued on the war situation and on the state of feeling in neutral and Allied countries. Cables and wireless were greatly extended, thus enabling authentic news to be supplied quickly to all parts of the world. In this connection it is interesting to note that the news provided by wireless from the Ministry was often the sole source of information to our troops in distant parts as to the progress of the war in other centres.

Apart from the dissemination of literature dealing with the war, a wide use was also made of photography and the cinema. The Ministry arranged for official photographers to visit the various Fronts and centres of war effort at home, and exhibitions were held of the photographs so taken. The first of these took place at the Grafton Galleries in the Spring of 1918, and consisted exclusively of prints of military subjects, showing operations at the various fronts. Nearly a quarter of a million visited this exhibition in six weeks, and its subsequent visit to the provincial towns met with a corresponding success. Smaller sets of photographs were sent to towns whose galleries were not large enough for the whole collection. An immense success was also achieved by the unique collection of naval photographs at the Prince's Rooms, for which a large number of excellent prints were specially released by the Admiralty. These again were exhibited in the provinces, and the complete collection was also sent to America.

The use of cinematograph films, apart from and outside licensed picture theatres, was controlled by the War Aims Committee. Among the duties taken over from the Department of Information was the production, in connection with other Government Departments, of short films advertising various matters which the different Ministries wished to be made public, such

as the need for economy in food and fuel; the national duty in matters of investment; salvage; important new methods for the cultivation of produce for the benefit of allotment workers. Every important country in the world, and a large proportion of the smaller countries, received continuous supplies of certain films produced by or under the direction of the Ministry.

The Ministry had also the benefit of the services of several distinguished artists, and a valuable series of war pictures was presented to the nation, while commissions were given for pictures of gun factories, munition works, and of the life of the British naval and air services. Exhibitions of the work were held under the Ministry's direction in London and Manchester, and a large collection of pictures was sent to America.

An important side of the Ministry's work was that of organising hospitality for the American troops in this country and of providing for their entertainment. For this purpose local sub-committees were formed in most of the cities and towns of Great Britain and Ireland, the Ministry acting as clearing house and making the necessary travelling arrangements. In addition, the Ministry was also concerned with the invitation and entertainment of foreign and colonial publicists. It arranged tours for them to industrial centres, to naval and military depôts and to the Front, as well as lectures on the war situation.

Striking evidence has been forthcoming as to the success abroad of the publicity campaign, and the service which it rendered to the Allied cause has been widely recognised. After the signing of the Armistice, it was decided that conditions no longer made it necessary to continue the separate existence of the Ministry of Information, and those of its activities which had to be maintained were accordingly transferred to other departments.



## CHAPTER V.

**THE NAVY.****General.**

The event which distinguished the late war from all former wars was the surrender for internment of the latest built and most efficient of the men-of-war of the German Navy—battleships, battle cruisers, light cruisers and destroyers—on November 21st, 1918, in the North Sea, which the British Fleet had controlled for four and a half years. That event was accompanied by the arrival at Harwich of all the available enemy submarines for surrender. This unprecedented event was but the culmination of a process of demoralisation which had been going on in the German Navy for some time, as a result of its impotence. The revolutionary movement which shook the German Empire to its foundations in the hour of its overwhelming defeat began among the seamen. It began with a rising when the men realised, early in the autumn of 1918, that, having experienced at the battle of Jutland the power of the Grand Fleet, they were to be called upon, as a forlorn hope, to face another ordeal from which they feared the High Sea Fleet might not again be rescued by the mist and oncoming of night. The policy of intensive mining of the Heligoland Bight area, which was pursued during 1918 with great vigour, probably had also considerable effect in bringing the war to a close; the constant losses of small craft in this area, combined with a general sense of insecurity, certainly contributed largely to the demoralisation of the German Navy, and culminated in open mutiny. Nor, in surveying the war situation on the eve of the Armistice, is it possible to ignore the influence of the British Naval blockade on the German people generally. Their conviction that further resistance would merely prolong a struggle which had become hopeless was largely due to the ever-increasing pressure of sea power. In these circumstances the war came to an end. When the struggle opened, the German Fleet ranked second among the naval forces of the world; when the Armistice was concluded, Germany, as a maritime power, had to all intents and purposes, ceased to exist.

Modern Naval historians realised, after an interval of nearly a century, that the foundations of victory on the field of Waterloo were laid by British seamen off Cape Trafalgar. The Great War which closed, so far as naval operations were concerned, in 1918 was also decided in the main by the influence of the British Fleet. M. Clemenceau, in the course of a speech early in December last, stated that in a conversation which he had with the British Prime Minister soon after the signing of the Armistice, Mr. Lloyd George asked him, "Do you admit that without the British Fleet you would not have been able to continue the war?" The French Prime Minister replied that he had no hesitation in

answering in the affirmative. In August, 1914, the German Fleet was far stronger than the combined navies of France and Russia, and it was the intervention of the British Fleet, and all that it involved in immediate military reinforcements and in freedom of sea communications which averted defeat when Germany struck, confident of a speedy victory. Bismarck had declared many years before that "Italy must be able to rely on the assistance of the British Fleet, for the Triple Alliance cannot protect the Italian coast." Once it had been determined that the British Fleet would join in the war against Germany and Austria-Hungary, the Germans anticipated that the naval and military power of Italy would be employed against them. That expectation was fulfilled. As the war progressed, command of the sea became more and more vital to France and Italy and, in a smaller degree, to Russia; and the British Fleet, besides enabling the British Empire to mobilise and develop its varied powers of offence, assured to these countries and to the other Allies, almost unrestricted use of the seas of the world. In April, 1917, the United States, possessing enormous resources of men, money and munition supplies, but a limited capacity for sea carriage, declared war upon Germany. Under the protection of the British Navy, supported by the naval forces of the United States, the Atlantic was bridged, in spite of the enemy's submarines. The two English-speaking navies subsequently co-operated on terms of close alliance and high efficiency in maintaining the sea communication of the Allies and in transporting from the United States to European battlefields the rapidly growing armies which the American people provided. In those various ways the British Fleet contributed to the defeat of the enemy.

Thus, although 1918 was marked by no Fleet action, during that year the cumulative effects of sea power became apparent. The Grand Fleet continued to be the main support of the Allied cause, for without its influence none of the subsidiary operations, world-wide in their character, could have been undertaken with hope of success. It is true that the German surface craft remained for the most part inactive in strongly fortified bases, and that in these circumstances, the operations of the Grand Fleet, which continued "to fill the North Sea," were necessarily lacking in incident. But, nevertheless, the Grand Fleet was the essential support of all the work carried out by the naval forces of the Allies in all the seas. It was the Grand Fleet that made possible the increasingly successful efforts put forth during 1918 to combat the enemy's unrestricted submarine campaign. It was the Grand Fleet that secured the transport, with very small losses, of American and British troops across the seas, which was to prove the decisive factor in the eventual overthrow of the enemy's power. The same is true of all the revictualling and fuelling movements—of vital importance to the Allies embarrassed by their absorption of effort in the military operations and by the depredations of the enemy—during what proved to be the final struggle of endurance.

## **Fleet Operations.**

During the year, as already stated, no operations of primary importance were carried out by the Grand Fleet. Its functions remained as in previous years. It was principally employed, together with the squadron of United States battleships working with it, in exercising control of the North Sea, but also in supporting minelaying operations and escorting Scandinavian convoys.

The High Sea Fleet confined its activities almost entirely to the vicinity of its harbours and the security of its minefields. No enemy surface vessels left the North Sea, and only two raids were attempted on our coasts—the first at Yarmouth on the 14th January and the second on the 15th February at Dover. The prevention of such offensive tactics by the enemy necessitated maintaining the Grand Fleet in a constant state of immediate readiness.

No opportunity of harrying the enemy was lost. Portions of the Fleet were frequently employed at sea on miscellaneous operations, having for their object the exercising of the ships and relief from the monotony almost inseparable from naval warfare under the conditions described. Sweeps were frequently carried out in the North Sea with the object of destroying Zeppelins and intercepting enemy forces that might be at sea, also in the Kattegat with the object of sinking enemy mine-sweepers and fishing vessels.

In the Southern Waters the light cruisers and torpedo craft stationed at Harwich were employed in attacking German vessels in the Heligoland Bight and in support of our mine-layers. Many operations were undertaken by the Harwich Force alone, or in conjunction with aircraft and coastal motor boats, but beyond the destruction of a few mine-sweepers no decisive results were obtained. These operations had, however, the effect of keeping up the pressure on the enemy and retaining the initiative in our hands.

During the evacuation of the Flanders coast ports by the enemy the Harwich Force was constantly at sea watching the routes between the Belgian and German harbours. In spite of this, the enemy, favoured by the long nights, bad weather and low visibility, was enabled to withdraw his ships without being brought to action.

The submarines stationed on the East Coast were employed principally in patrol duties in the Heligoland Bight and the Kattegat, to intercept enemy submarines and to give information as to the movements of his surface vessels.

Minelaying submarines were frequently employed in the inner waters of the Heligoland Bight.

The forces stationed in the Straits of Dover were often engaged in operations against the enemy forces stationed at Zeebrugge and Ostend, their primary task being to deny passage of the

Straits to the U-boats. Large numbers of drifters and auxiliary craft were employed for this purpose, supported by monitors and destroyers.

Several destroyer raids were made on the Dover patrol but, with the exception of a single case, which resulted in the regrettable loss of six drifters, the protection afforded by our destroyers rendered the raids abortive. On many occasions Ostend and Zeebrugge were bombarded by our monitors and other vessels, and during these operations surface craft, both in harbour and at sea, were attacked by our coastal motor boats.

The blocking of Zeebrugge and Ostend harbours, which was so gallantly effected by the Dover Force in April, 1918, greatly reduced the activity of enemy surface vessels and, though it is believed his submarines were able to pass the blockships at high water, the operation was undoubtedly most successful.

No greater enterprise was shown by the German light craft working from Flanders than by his forces based on the German ports. On the many occasions on which light forces of either side sighted each other, the enemy, sometimes after an indecisive action at long range, invariably retreated to the protection of his coast batteries. The case of his successful night raid on the Dover Patrol has been mentioned above, and the only other time on which he ventured to risk contact with our vessels he paid a heavy price in the loss of two, if not four, torpedo boats.

It will be seen from the foregoing that the Germans showed little initiative in the employment of their surface fleet and no inclination to risk it in open fight at sea. German naval activity was, in fact, confined almost entirely to an intensive submarine campaign against merchant ships. Considerable difficulty was experienced by the Admiralty in maintaining the supply of torpedo craft to meet the continually increasing demand for vessels of this type for convoy and other services. It was found impracticable to combine the two duties of convoy escort and fleet work. To divert destroyers from the Grand Fleet flotillas to the former service, in the hope that when required for the fleet they would be available in sufficient numbers, would have been unsound, as it might have resulted in the fleet proceeding to sea with an inadequate force of torpedo craft, thereby missing an opportunity for a decisive fleet action.

Nevertheless, the fleet in itself was a source of great and essential assistance to the operations against the submarine. The Northern Barrage, the intensive mining system in the Heligoland Bight, and the Dover Barrage, in themselves purely anti-submarine measures, were only possible owing to the support of the Grand Fleet, and all operations in connection with them were protected by the heavy and light vessels of the Fleet.

Similarly, the trade between the Scandinavian neutrals and England throughout the year was supported by units of the Grand Fleet and maintained free from attack by enemy surface craft. The convoys were attacked on occasions by submarines, but the percentage of losses was small.

The work of the Grand Fleet in the war culminated in the surrender for internment of the main portion of the enemy's surface ships off Rosyth and the surrender of his submarines at Harwich.

Subsequently to the signing of the Armistice, vessels of the Grand Fleet and Harwich Force assisted in the repatriation of prisoners of war.

The Allied Naval Commission was conveyed to German waters.

A light cruiser squadron and a flotilla of destroyers were sent to the Baltic in order to support the Baltic States by sea in their struggle against Bolshevism and to assist them in the defence of their country to the extent of landing arms.

### **Other Operations.**

Operations in parts of the world other than those dominated by the Grand Fleet were mainly confined to anti-submarine measures, and to such vital and never-ceasing matters of war routine, as the patrolling of our own and Allied waters, mine-sweeping, escorting troopships and merchant vessels, and maintaining supplies for our naval and military forces at outlying stations and bases. Opportunities of engaging the enemy's surface vessels were necessarily rare, but the gallant attack by our small craft outside the Dardanelles on the "Goeben" and "Breslau" in January, 1918, which resulted in the latter's destruction, is worthy of note. The Navy also took an active part, in conjunction with the land forces of the Allies, in such widely-separated theatres as the Adriatic, Palestine, East Africa, the White Sea, and the Far East. Mention must be made of the operations in the Sea of Marmora, Black and Caspian Seas during the latter months of 1918. These operations were devoted to enforcing the Armistice terms, to preserving the local trade from extinction and friendly populations from massacre at the hands of the Bolsheviks. Briefly, they consisted in sweeping a passage for the Allied Fleet into the Black Sea, the policing of the principal ports until the arrival of Allied military forces, and the arming of a squadron on the Caspian which has twice been engaged with the Bolshevik forces.

The scope and efficiency of all these operations were greatly increased by the close co-operation of units of the Royal Naval Air Service, and by contingents of the Royal Air Force working with the Navy. The duties the aircraft were called upon to perform were multifarious and included the control of gunfire for ships and shore batteries, which was particularly valuable on the Belgian coast during bombardments from considerable distances; attacks on enemy forces, such as that on the "Goeben" and "Breslau" when they left the Dardanelles, and numerous encounters with enemy light forces operating from Ostend and Zeebrugge; on enemy bases such as Durazzo, Ostend, Zeebrugge,

Constantinople, and on Zeppelin and other enemy aircraft bases ; on enemy lines of communication in Palestine, Turkey in Europe, Bulgaria, Russia and Belgium ; long distance reconnaissances, which the increased range of aircraft renders more and more valuable ; land reconnaissance and photographic work, which played a most important part in such operations as the blocking of Ostend and Zeebrugge ; prevention of reconnaissance and attack by enemy aircraft ; and last, but not least, the escort of our shipping, the patrol of shipping routes, the location of mine-fields, and the hunting down of enemy submarines. In all these branches there has been a large increase, involving great expansion of all types of aircraft, including seaplanes, aeroplanes, airships and kite balloons. As an instance showing the increase it is interesting to note that, whereas in 1917 the average weekly aircraft patrol on the British coast was approximately 30,000 miles, in 1918 this figure was frequently exceeded in one day's flying.

### The Submarine War.

The most important active factor in the naval situation during the period under review has been the enemy submarine campaign against the shipping of the Allies, since the success of such a campaign would have entailed a virtual severance of the vital sea communications of the Allies in supplying the various theatres of war with men, ammunition and stores, besides cutting off the imports essential to the life of the Allied countries at war and the manufacture of war material.

How far the efforts made by the Admiralty to combat this menace with the various means at their disposal succeeded can best be indicated by the following figures showing the monthly losses of British Merchant Vessels (in gross tons) due to enemy action and marine risk :—

BRITISH.			ALLIED & NEUTRAL.		TOTAL.	
Period.	Month.	Quarter.	Month.	Quarter.	Month.	Quarter.
1917.						
September ...	209,212	952,938	159,949	545,535	369,161	1,494,473
October ...	289,973		197,364		487,337	
November ...	196,560		136,883		333,443	
December ...	296,356	782,889	155,707	489,954	452,063	1,272,843
1918.						
January ...	218,621		140,842		359,463	
February ...	254,303		130,629		384,932	
March ...	224,744	697,668	174,197	445,668	398,941	1,143,336
April ...	233,426		83,684		317,110	
May ...	231,787		134,756		366,543	
June ...	165,649	630,862	112,705	331,145	278,354	962,007
July ...	182,524		142,314		324,838	
August ...	176,854		164,475		341,329	
September ...	151,652	512,030	96,694	403,483	249,346	915,513
October ...	83,952		93,582		177,534	
November ...	18,202		12,114		30,316	

In connection with the foregoing figures, the tonnage of steamships of 500 gross tons entering and clearing United Kingdom ports from and to ports overseas (including cross-Channel journeys) remained at practically the same figure, as the following particulars show :—

<i>Period, 1918.</i>	<i>Gross Tons.</i>
April ... ..	7,040,309
May ... ..	7,777,843
June ... ..	7,430,386
July ... ..	7,718,898
August ... ..	8,158,639
September ... ..	7,515,061
October ... ..	7,594,476

It will be realised that the situation when hostilities ceased was still serious, as the net loss of British mercantile shipping since the commencement of the war amounted to about  $3\frac{1}{2}$  million tons. Notwithstanding this, the position was less acute than it had been, and greater efforts were being made in shipbuilding, in order to make up our losses and to meet the ever-increasing demands on tonnage and obligations to our Allies.

It was recognised that the most effective way of dealing with the submarines was to attack them from the moment of leaving their bases; and secondly, to prevent, if possible, their exit from the North Sea. Towards effecting this a mining policy was introduced in 1917, having for its objects (1) the systematic mining of the Heligoland Bight, to prevent the submarines from leaving their bases by that route, and (2) the sealing-up of the exits from the North Sea. With regard to (1), a dangerous area was formed right across the approaches to the Heligoland Bight. That the effect on the whole was satisfactory is shown by the reported increased use of the Kattegat by the U-boats. This in itself was an advantage, as it increased the distance the submarines had to go to reach their areas of operations and reduced the time they could remain in those areas. Moreover our mining policy in the Heligoland Bight occasioned heavy losses to the enemy among the minesweepers and their escorts. As regards (2), the first step was to block the Straits of Dover, as it was recognised that while safe passage through this channel could be made by submarines, they were on the whole unlikely to use the longer route. The Straits were eventually closed by broad minefields extending from the British to the French coasts.

To deal with the northern exit in the same manner was a more difficult problem, since, whereas the Dover Straits are only twenty miles wide, the distance between the Orkneys and Norway is some two hundred miles; but the arrival of a large squadron of United States mine-layers made it a practical proposition and the work was nearing completion when the Armistice was signed. The rapid progress of the work was largely due to the mines and mine-layers provided by America.

The mine barrages in the Dover Straits and at the northern exit of the North Sea were not entirely relied upon to prevent the passage of enemy submarines. In the case of the Dover barrage an intensive patrol of auxiliary vessels was established, supported by monitors and destroyers. In the case of the Northern barrage it was found impracticable to maintain a patrol right across the North Sea, but a patrol force of sloops and trawlers was constantly employed in this area.

Although this policy undoubtedly increased the danger to which enemy submarines were exposed in proceeding to and from their operating areas, the practical effect in reducing the number of submarines operating in the Atlantic at any one time was not great and did not admit of any reduction in the anti-submarine forces employed outside the North Sea.

*Arming of Merchant Vessels.*—The progress made in the provision of a gun armament as a means of defence against submarines is indicated by the fact that at the signing of the Armistice the number of ships defensively armed was approximately 4,000, leaving roughly 1,000 ships to be armed. The latter number comprised ships repairing and vessels trading temporarily outside the recognised danger zones.

As the armament and radius of action of enemy submarines increased, and as more guns became available, the lighter guns in ships were replaced by others of a heavier calibre.

The provision of guns' crews alone entailed a considerable drain on the Navy, approximately 11,500 men being required for this purpose (it is estimated that when all ships had been satisfactorily armed the number would have increased to about 18,000), besides a large organisation for fitting out vessels and maintaining the guns in an efficient condition.

Since the date of the Armistice all new work of defensive arming has been suspended and the armament removed from the smaller vessels so far as storage facilities permit. Stiffening of armament is being provided in ships building.

*Instruction of Officers and Men of the Mercantile Marine.*—In addition to the detailed orders issued by the Admiralty for the guidance of officers of the Merchant Service trading in waters in which enemy submarines and raiders might be met, an important feature was the course of instruction to masters and other officers of the Merchant Service on the tactics and devices for defeating the submarine menace.

These courses proved to be of such value that in May, 1918, they were made compulsory for all masters and chief officers of vessels of 1,600 tons and above, and in September this regulation was extended to ships of 1,000 tons and above and to second officers. The surrender of enemy submarines, under the terms of the Armistice, made it possible to suspend certain regulations and restrictions imposed by the Admiralty in regard to matters pertaining to the navigation and defensive organisation of vessels



of the Mercantile Marine. The courses were, therefore, discontinued after 22nd November, up to which date 4,620 masters and 5,606 officers had attended.

The utility of the courses lay chiefly in the confidence which they had imparted to those officers who, before attending them, were inclined to regard the submarine as undefeatable. The course convinced them that these craft could be evaded or driven off if the Admiralty orders as explained and practised at the courses were carried out.

Classes of instruction in signals were also held at the various ports, the necessity for this having been particularly brought into prominence through the adoption of the convoy system. Some 45,500 officers and men of the Mercantile Marine passed through these classes.

*Convoying of Merchant Ships.*—The principal factor in reducing tonnage losses from enemy submarine attack was undoubtedly the introduction of the convoy system, whereby sailings were regulated and protection afforded to merchant ships through the most dangerous parts of their voyage.

Statistics show that the percentage of vessels sailing in convoy lost was 75, this figure including vessels in all convoys except those in the French coal trade, which were, strictly speaking, "controlled sailings."

Apart, however, from this satisfactory result, the convoy system engendered a feeling of confidence in the Mercantile Marine, and brought the Royal Navy and the Mercantile Marine into much closer touch. The presence of an escort or escorts and the feeling that in case of attack help was immediately available, as well as the knowledge that neither masters nor officers and men were likely to be taken prisoners by an enemy submarine while ships remained in convoy, were important factors in maintaining the morale of the Merchant Service personnel.

The Mercantile Marine adapted itself admirably to the new conditions, and the handling of merchant ships in convoy reflects the greatest credit on all connected with that Service.

At first some delay to shipping was inevitable, but by close co-operation between the Ministry of Shipping and the Admiralty, and by the arrangement of a fixed convoy programme, it became possible to arrange for ships to be loaded to join definite convoys and to be worked to a regular time-table; as a result, the ships were turned round more quickly than they were previously. The rapid turn-round of ships, resulting in a considerable saving of tonnage, was particularly noticeable in the Mediterranean after an organisation consisting of naval officers and shipping experts had been set up to control the shipping situation in that sea.

A closer control of trade generally was possible, and diversions of shipping were facilitated, whether necessary on account of submarine or mining activity or of trade requirements, as vessels in convoy, or even the convoys themselves, could be diverted at any moment. The effect of this control was very

marked in connection with the transport of the United States troops to Europe, as it enabled arrangements for their transportation to be put into effect at such short notice as would have been impossible under other conditions.

As soon as the Armistice was signed, homeward mercantile convoys from North America, West Coast of Africa and Gibraltar and all Mediterranean convoys ceased, except in the case of ships carrying troops or invalids, for which special programmes continued to be made.

Outward North Atlantic convoys had just previously been suspended, and shortly afterwards outward convoys to the Mediterranean also were discontinued. As soon as the enemy submarines were known to have returned to Germany, East Coast and Scandinavian shipping was no longer convoyed, and by the end of November all convoys had ceased. Port convoy offices at home and abroad were gradually reduced and all were closed by 31st December. The armed merchant cruisers and commissioned escort ships which had been used as ocean escorts of convoys are being paid off and returned to their owners for private trade.

*Work of Escort Vessels.*—The convoy of merchant ships was, of course, not carried out without a great deal of work of an extremely arduous and trying nature on the part of the escort vessels, which comprised armed merchant and other cruisers, destroyers, sloops, P-boats and trawlers. Large numbers of these vessels were diverted to this duty, not only in our waters, but in foreign waters as well, and their success in this rôle and their skill in taking the offensive whenever the presence of the enemy was detected contributed largely to frustrating the enemy's attacks against shipping.

*Aircraft versus Submarine.*—During the year the employment of aircraft in the anti-submarine campaign was further developed with satisfactory results, and the use of this arm, involving the establishment of a complete air patrol round our coasts, was being extended up to the time hostilities ceased.

Airships and seaplanes for the purpose of reconnaissance and escort work, and aeroplanes for the patrol of waters adjacent to the coast, proved of great value.

*Scientific Research.*—Side by side with all the practical measures that seamen could adopt to frustrate or limit the activity of enemy submarines at sea, research of an intensive character was continually in progress. In order to bring a large mass of scientific and engineering talent into close touch with the actual requirements of the anti-submarine campaign, Committees were formed in Manchester, Glasgow and London successively, on which many leading scientists, engineers and manufacturers voluntarily offered their services. Those Committees before setting to work were shown all that had been done up to date, and the Admiralty reaped the benefit of having at its command such bodies to whom it could entrust any particular line of research or experiment that seemed appropriate,

and for which existing Naval establishments may have been neither equipped nor have had leisure.

The Admiralty Experimental Stations at Parkeston Quay, Harwich and Hawkraig, did a great deal of invaluable work, and much of the apparatus produced by these stations has been in use at sea. At Portland the Anti-Submarine School was established and is now in full working order: all officers and men required to use special apparatus at sea were taught there, but previous to joining they had a short course at the Crystal Palace, during which the "selection committee," composed of practical naval officers, sound experts, and psychologists, had them under consideration and training, and eliminated all those who did not show special aptitude.

The closest possible touch existed between British and American and French scientists, both by written reports and constant interchange of visits. Not by design, but by happy accident, the three countries developed three entirely different systems of detection apparatus; trials were constantly in progress at our experimental stations, and at the time the Armistice was signed there were upwards of 150 British vessels carrying American apparatus as well as British, and there were also several British vessels carrying French apparatus.

The British Navy had at sea at the cessation of hostilities about 230 officers and over 2,700 men specially trained in submarine detecting apparatus, and, in addition to those serving at sea, there were the staffs of shore listening and detecting stations of different kinds stationed at salient points on our coasts, both at home and abroad, and other places of special naval importance, such as the vicinity of our own naval bases or large shipping centres.

The combined result of offensive and defensive measures, which overlapped and could not be properly separated, was that from the time the submarine left its base until it returned it was in danger of sudden destruction, and in consequence it was beginning to look upon itself quite as much as one of the hunted as one of the hunters.

The concrete results of the anti-submarine warfare were illustrated by the publication by the Admiralty of the names of 150 submarine commanders lost to the enemy during the war, the great proportion being claimed since the measures outlined above were taken in hand at the outset of the intensive anti-submarine campaign. Later information indicates that the total submarine losses of the enemy were approximately 200, out of a total of approximately 370 completed up to the signing of the Armistice.

*Allied Co-operation.*—In the whole of the anti-submarine warfare in which we were engaged we were in close touch with our Allies. American destroyers did a large amount of convoy escort work in the Atlantic, and French, Italian and Japanese vessels worked with ours in the Mediterranean. Every new method of meeting the menace was at once passed on to all

concerned, and each new invention placed at the disposal of all.

*Minesweeping.*—Closely bound up with the anti-submarine campaign were the operations connected with keeping the seas and important channels clear of mines laid by enemy submarines and surface craft, and a large organisation was built up for the purpose. Too much praise cannot be bestowed on the personnel of the minesweeping forces, who performed their dangerous work in all conditions of weather, not only off the British coasts, but in the Mediterranean, South and West Africa, East and West Indies, Canada, Australia, New Zealand and Straits Settlements. The benefit of British experience in minesweeping was freely placed at the disposal of the Allies in the inception and development of minesweeping organisations in their own waters.

Early in 1918, the enemy commenced a minelaying policy by submarines which eventually developed into an attempt to form a mine barrage to seaward of the Firth of Forth. It consisted of groups of mines laid at intervals apart by large minelaying submarines. The operation was conducted with considerable skill by the enemy, but, owing to the time which necessarily elapsed between voyages of submarines concerned and the fact that after the first two groups had been laid it was possible to deduce the lines on which the operation would proceed, it had no marked effect such as would have been the case if it had been carried out suddenly by surface minelayers. It, however, necessitated the concentration of a considerable force of minesweepers in the Firth of Forth.

To British minesweepers was allotted the task of sweeping the Dardanelles prior to the passage of the Allied Fleet in November, 1918, when some 700 mines, enemy and Allied, were swept up.

The following figures indicate the reduction of the effect of enemy minelaying activities during the last two years, the decrease being due to four causes, viz., (1) the general campaign against submarines resulting in heavy losses of minelaying submarines, (2) the improved efficiency of the minesweeping organisation, (3) the fitting of merchant ships with a form of protection against mines, and (4) the improvement in control and direction of shipping by patrols, etc. :—

<i>Period.</i>	<i>No. of merchant vessels sunk or damaged by mine.</i>				
1917.					
1st Quarter	...	...	...	...	47
2nd „	...	...	...	...	42
3rd „	...	...	...	...	24
4th „	...	...	...	...	24
1918.					
1st Quarter	...	...	...	...	11
2nd „	...	...	...	...	4
3rd „	...	...	...	...	4
4th „	(up to signing of Armistice)				—

On the cessation of hostilities, routine minesweeping on a reduced scale was continued until there was no likelihood of further enemy minelaying.

The arrangements for clearing the seas of mines were meanwhile promulgated and brought into force when the situation admitted, 1,168 British auxiliary patrol vessels being engaged in this service. Considerable progress has already been made, with the result that in British home waters, with the exception of the English Channel and North Sea, traffic is practically unrestricted.

A Committee has been formed at the Admiralty which, at the request of the Allied and Associated Powers, has undertaken to promulgate internationally all information regarding dangerous areas and safe routes. This is being done by means of mine warnings to mariners, and notices covering a large portion of the world had already been issued by the end of 1918. Two foreign merchant vessels have been sunk in 1918 by mines in British zones since the signing of the Armistice, in both cases in dangerous areas which had been notified to shipping.

*Protection of Fishing Industries.*—At the commencement of the war there was practically no organisation or arrangement for the protection of the vessels left for fishing in order to maintain food supplies.

The fishing vessels comprised all classes, from steam trawlers of 350 tons to small boats, but, speaking generally, fell into two large divisions, viz., deep-sea vessels and in-shore craft. The deep-sea vessels, to be effective as food producers, had to go to fishing grounds such as the Dogger Bank, Iceland, and other regions in the Atlantic, where they were outside patrol lines and remote from support.

Owing to the frequency with which enemy submarines attacked and destroyed unarmed fishing vessels, the Admiralty were faced with the problem of protecting them so as to permit of fishing being continued. As it was not practicable to provide escorts for these vessels, they were armed for their own protection. A fishing vessel is not large enough to carry an armament sufficient to engage singly a submarine with any possibility of success, whereas the combined armament of several vessels provides an effective defence.

From these considerations the Group System was evolved, under which vessels worked in close company in small squadrons, one of each squadron carrying W./T. and the majority of the craft being armed. The vessels were commissioned and placed under direct naval control, the crews being enrolled in a Special Reserve, and the whole operated under the orders of senior naval officers of the ports upon which they were based.

Approximately 370 steam trawlers were controlled under this organisation, 190 of them being armed and 37 fitted with W./T., while some 40 officers of the R.N.V.R. were appointed to take

charge of the fighting organisation of the groups. In addition, 29 steam drifters were commissioned and armed under the scheme.

The system was a complete success, as is shown by the fact that, whereas in the third year of the war, when the scheme was not in operation, 151 steam trawlers were sunk by submarines, in the fourth year, when it was in operation, the number was only four, and none were sunk between the end of the fourth year and the date of the Armistice. At the same time the amount of fish caught was largely increased.

The in-shore vessels were too small to protect themselves, and it was only possible to safeguard them by keeping them within restricted limits, and, in a few cases, by providing patrol vessels to accompany them. These limits were, as a rule, fixed and enforced by the local naval authority, acting in close co-operation with the local fishery officer.

### **Transportation.**

The most conspicuous feature of this year's military sea transport was the increased number of troops taken across the Channel and from America.

In order to meet the urgent demand for reinforcements caused by the German offensive in March, the Admiralty made arrangements to convey troops to France up to 30,000 a day, and could have carried more than this number if necessary. During the fortnight ending 8th April, a total of 268,259 were so conveyed.

There was a progressive increase in the number of U.S. troops brought across the Atlantic in British ships, from 18,638 in March to 218,274 in July, the monthly average being 153,000 for the six months ending 31st October. In addition, the number of American troops crossing from the United Kingdom to France averaged 6,000 a day during a considerable period of time in the summer.

Large numbers of troops were also conveyed to the theatres of war in the Mediterranean, Egypt and Mesopotamia.

During the period 4th August, 1914, to 30th November, 1918, the total numbers transported overseas were :—

Personnel	...	...	...	23,864,675
Horses and mules	...	...	...	2,240,495
Vehicles	...	...	...	506,486
Stores—British	...	...	...	46,502,486 tons.
Stores—Allied	...	...	...	5,535,679 „

The losses, due to enemy action, of personnel while in transit during the same period amounted to 4,394.

A daily average of 25,023 personnel and 23,471 tons of stores were transported across the Channel during September, 1918. In the following month, 614 steamers of about  $2\frac{1}{4}$  million gross tons were engaged in carrying troops and stores to our forces in the various theatres of war.

### **Construction and Supply.**

Apart from the primary and vital necessity of maintaining the efficiency and supremacy of the Grand Fleet, naval construction and supply in 1918 were directed mainly towards combating the submarine menace, and were therefore concentrated on the provision of ships, aircraft, guns, depth charges, mines and other devices intended for that purpose.

During the year the displacement tonnage completed for the R.N. amounted to some 460,000 tons, a very large proportion of which was built to meet the demand for torpedo-boat destroyers and small anti-submarine craft. The ships of all kinds employed on naval service towards the end of the year had a tonnage of  $6\frac{1}{2}$  million as against 6 millions a year ago, while the number of transports, fleet attendants, overseas oilers and similar vessels had risen from 700 to nearly 800 during the same period.

There was an increase in the output of guns, particularly of the types for arming merchantmen, and also in the supply of ammunition of all kinds, which was 50 per cent. greater than in the previous year. The production of depth charges was nearly quadrupled and that of mines more than doubled.

Repairs and refits have been efficiently carried out on the increasing number of warships and auxiliary vessels, and the Royal Dockyards have also had to deal with a number of torpedoed merchantmen. By improvements in organisation, additions to plant, and increased labour-saving appliances at the Royal Dockyards, this large volume of work was dealt with without encroaching on the facilities available for repairing merchant ships in private yards.

### **Administration.**

Several important administrative changes took place at the Admiralty during the year.

Just before the new year Sir Rosslyn Wemyss, previously Deputy First Sea Lord, became First Sea Lord and Chief of the Naval Staff in succession to Viscount Jellicoe, and Rear-Admiral George Hope, previously Director of Operations, joined the Board as Deputy First Sea Lord. In March Rear-Admiral Sir Henry Oliver was appointed to the command of the First Battle Cruiser Squadron, being replaced as Deputy Chief of the Naval Staff by Rear-Admiral Sydney Fremantle, previously in command of the Aegean Squadron.

On April 1st, 1918, the Royal Air Force was formed by the amalgamation of the Royal Naval Air Service and the Royal Flying Corps. The administration of the Flying Services passed into the hands of the Air Council, and the Air Units serving with the Navy became "Air Force Contingents" of the Royal Air Force. The general principle underlying the new organisation was that, as regards heavier-than-air craft and kite balloons, Naval Air Force Contingents come under the respective Senior Naval Officers, and through them, under the Admiralty for Operations, but are under the Air Council for discipline and for maintenance of personnel, material and buildings. An exception to this principle was made at the time in the case of Air Force Contingents with the Grand Fleet, they being under naval discipline.

As regards the airship service, the personnel belongs to the Royal Air Force and comes under the Air Council for administration and discipline, but the Admiralty retain the control of airships and their housing sheds.

In consequence of the above change, the appointment of Fifth Sea Lord and Chief of the Naval Air Service lapsed, and a new Air Division of the Naval Staff was constituted to deal with matters relating to Air policy, organisation and operations.

The Naval Staff organisation has been strengthened and developed as found necessary from time to time, notably by the appointment, as advisers to the Chief of the Naval Staff, of a Director of Training and Staff Duties and a Director of Naval Artillery and Torpedo, the latter relieving the Director of Naval Ordnance and the Director of Torpedoes and Mining of their responsibility in connection with Fleet exercises and training.

There were also changes on the Maintenance side of the Board.

Early in the year Mr. Arthur Pease was appointed as Second Civil Lord to take charge of all matters connected with naval works, so as to leave the Civil Lord free to initiate and superintend the consideration of post-war problems.

In April Lord Pirrie was appointed Controller-General of Merchant Shipbuilding, under the First Lord of the Admiralty, the Controller of the Navy being at the same time relieved of all responsibility for merchant shipbuilding and repairs.

In June Rear-Admiral Sir Lionel Halsey (Third Sea Lord) was selected for a sea-going appointment and Sir Alan Anderson (Controller) retired from the Board: Captain C. M. de Bartolome (in command of H.M.S. "Warspite") was appointed Third Sea Lord and Controller, combining the principal functions of both offices; and Sir Robert Horne joined the Board as Third Civil Lord. The primary duties of the Third Civil Lord are connected



with the supply of labour and the provision and allocation of materials for the various services of the Admiralty, including the Department of the Controller-General of Merchant Ship-building.

As from 1st November the responsibility in connection with merchant shipbuilding was transferred from the First Lord to the Shipping Controller, this being a more logical arrangement in view of the stage which had then been reached in the war.

Early in the year an Admiralty Reconstruction Committee was formed to deal with the many important questions that would arise for decision at the conclusion of the war. The Committee is presided over by the Civil Lord, who is responsible for both the preliminary survey of the questions by Committees and for the presentation to the Board of the policy recommended. The Civil Lord has the assistance of Admiral of the Fleet Sir William May, as Vice-Chairman, and of other officers, who form sub-committees to consider the various subjects in conjunction with the representatives of the Naval Staff and Departments of the Admiralty.

The general arrangements for the organisation of scientific research and experiments to meet naval requirements were developed by the appointment of the well-known Consulting Engineer, Mr. C. H. Merz, M.Inst.C.E., as Director of Experiments and Research at the Admiralty, to direct and supervise all the executive arrangements in connection with scientific research and experiment, with a seat *ex officio* on the Central Committee of the Board of Invention and Research. Experimental Stations and Committees were developed in various localities, and with the ungrudging and voluntary assistance of many leading scientists many valuable results were achieved.

### Personnel.

On the side of the Administration which deals with the personnel of the Navy, the main effort has been to provide and train from raw material the necessary officers and men to maintain the efficiency of the Fleet and to meet the ever growing requirements of new construction. In addition, officers and men have been entered and trained for dealing with the many new methods of naval warfare. Anti-submarine work has made great demands on the personnel of the Navy.

In all branches the Navy remained a voluntary service throughout the war, and the numbers volunteering have been sufficient to meet requirements, but the introduction of the Military Service Act had great influence on individuals in inducing them to volunteer for the Navy instead of being conscripted for the Army, although large numbers would enter for the period of hostilities only.

During the year numbers of men were released for munitions, shipbuilding and coal mining as the demands for labour for these

industries became urgent; and every effort was made to employ in shore billets men of low medical grade and to substitute women for men.

The Women's Royal Naval Service was instituted and rapidly and efficiently organised. It numbered over 4,000 in December. In addition to doing women's ordinary housework, their sphere of utility gradually widened and latterly included wireless telegraphy, signalling, ledger keeping, motor driving and other similar duties formerly performed by men. Nearly 2,000 women were entered by the W.R.N.S. for the Air Force.

A special Royal Marine Engineer Corps, composed of about 7,000 men unfit for military service, was formed and organised under Marine discipline. These men were employed on building and other works under the orders of the Civil Engineer-in-Chief. Being a mobile body they could be moved from place to place as required.

At the beginning of the war foreign service reliefs were suspended, but as the war proceeded it became necessary to revert to the system of periodical relief of crews both for ships on foreign service and those at home which had been a long time in commission.

As previously mentioned, the R.N.A.S. ceased to exist as a separate service in April, 1918, and the majority of the officers and men were merged in the Royal Air Force. The transfer was quite optional and several hundreds preferred to remain in the Naval service.

### **Inter-Allied Co-operation.**

In the survey of the naval situation during 1917, mention was made of the formation, in December, 1917, of the Allied Naval Council, and the objects of the Council were also stated.

Since that time the Allied Naval Council held numerous meetings, as a rule in London, but also occasionally in Paris and Rome, for consideration of the various problems arising in the many theatres of war where two or more of the Allied Navies were operating against the common enemy. The formation of the Council resulted in much closer co-operation of effort, and the periodical meetings and discussions between the respective Ministers of Marine, Chiefs of the Naval Staff, and the responsible Naval Representatives in Europe of Japan and the United States of America, undoubtedly did much to facilitate the progress of operations, and to render possible the proper redistribution from time to time of the Allied Naval Forces available.

The Council established a permanent Secretariat in London to which were attached officers of all the Navies represented, and bureaux were also formed in Paris and Rome. Communi-

cations with Allied Navies not represented on the Council were maintained through their respective naval representatives in London. The meetings were presided over by the Minister of Marine of the country in which the meeting was held, and the members were accompanied by their expert advisers on the special subjects under discussion, while the officers representing the Council with the Military Representatives of the Supreme War Council at Versailles and the Naval Attachés in Allied countries were also in attendance.

The necessity for such a body will be apparent when the composition of the Allied naval forces in the various spheres of naval activity is examined. In the Arctic, for instance, there were British, French and United States ships and vessels; in the North Sea and round the coasts of Great Britain, United States and British forces; in the English Channel, British, French and United States craft. But it was in the Mediterranean that the problems of co-ordination of the Allied Naval effort were most complex. In that area ships and vessels of the British, French, Greek, Italian, Japanese and United States navies were operating, and later a squadron of Brazilian ships arrived, while Portuguese vessels worked on their own coasts at the entrance, and many questions naturally arose which could only be solved by a supreme Allied naval body.

The efficient and harmonious working of the Allied navies in the pursuit of their common aims—whether the convoy and escort of troops and their supplies across the Atlantic, the combat of the submarine menace, the barrage of the entrance to the Adriatic, the support of troops operating in Serbia and North Russia, or any of the numerous other naval objectives, is one of the features of this world war, and the British Navy acknowledges to the full the generous spirit in which the Allied navies joined to render this mutual co-operation effective in the highest degree.

## CHAPTER VI.

**THE ARMY.****Part I.****Military Operations.**

The general military situation at the beginning of 1918 may be briefly summarised as follows.

The collapse of Russia, consequent on the revolution in that country in the Spring of 1917, had transformed the whole military situation to the disadvantage of the Entente Powers. It enabled the enemy to transfer the bulk of his troops from Russia and Roumania, to exploit for his own benefit the vast resources of those countries, and to secure access to the Middle East, by gaining control of the Black Sea. The enemy was not slow to profit by these advantages and, having concluded an armistice with Russia on November 28th, thenceforth devoted all his efforts towards achieving a decisive victory over his other adversaries. Throughout the latter part of 1917 and during the early months of 1918 he transferred a large number of troops from Russia and Roumania to the West, with the result that by March the German and Allied forces on the Western Front were approximately equal in number. A few American divisions had arrived in France, but they were only partially trained, and the Allies did not at that period contemplate the possibility of receiving any material assistance from the American Army for many months to come. With the cessation of hostilities on the Russian Front, and with a favourable geographical position in the West, which gave him the advantage of acting on interior lines, the enemy was able to dispose of a larger general reserve than the Allied armies had at their disposal. He had thus been able to keep out of the line for longer periods a greater number of men, who were put through a system of intensive training with a view to an offensive on a great scale. The conditions on the Russian front during 1917 had also been exceedingly favourable for the training of troops in open warfare. The result was that at the commencement the Germans had a larger proportion of very highly trained troops than the Allies possessed, and the fact that they were under one command gave them an additional advantage.

In Italy the Italian Army, reinforced by British and French contingents, was holding the line of the Piave to which it had retired after the reverse it had sustained on the Isonzo in October, 1917.

On the Macedonian front the relative position of the belligerents had undergone no material change in 1917, but the deposition of King Constantine and the intervention of Greece on our side had brought us a valuable reinforcement in the Greek Army, and had enabled us to utilise Greek ports and railways for the supply of the Allies forces, thus facilitating greatly the problem of transport.

In Palestine General Allenby, after the capture of Jerusalem, had extended his right flank to the Jordan and was in occupation of the line Jaffa-Jerusalem-Jericho with his right resting on the Jordan and his left on the sea.

In Armenia the relative situation of the Russian and Turkish forces had undergone little change during 1917, but by the beginning of this year the Russian Army was completely demoralised and the majority of their troops had left the front, which was held mainly by Armenian levies.

In Mesopotamia, our troops having successively defeated the Turkish forces on the Euphrates, the Tigris and the Diala, were in occupation of the Jebel Hamrin Hills on either side of the Diala Valley; on the Tigris they held a position covering Samara, and on the Euphrates were holding a line in advance of Ramadie.

In Persia the remnant of the Russian forces remaining on that front were completely disorganised and were evacuating the country.

In East Africa Von Lettow Vorbeck, with the remainder of the German forces who had escaped capture, had crossed the Rovuma into Portuguese territory, and his main body was situated in the Upper-Lujenda Valley. General Van Deventer's forces were being disposed with a view to a converging advance against the enemy from German East Africa, from Lake Nyassa, and from a base at Port Amelia on the coast of Portuguese East Africa.

We now turn to the events of the past 12 months in each theatre of war in which we have had troops engaged.

### **Western Theatre.**

In the Western Theatre nothing of material importance took place until the third week in March, by which time the enemy had no less than 194 divisions on this front, the establishment of his battalions had been increased by 100 men, and a strategic reserve of more than 80 divisions had been constituted, the bulk of which was concentrated in a central position in the Laon-St. Quentin-Cambrai area, affording the enemy the opportunity of throwing against either the British or French armies a greatly superior weight of numbers at any moment he might select. The enemy's central position conferred upon him the advantage of strategical surprise, while the numbers at his disposal enabled him to prepare an attack on a front of about 50 miles on any part of the Allied line. In addition to the factor of strategical surprise obtained by his geographical position, he also introduced, by means of good staff work and organisation, by careful training and by a high standard of leadership, an element of tactical surprise which had been, generally speaking, lacking in the case of previous offensives on the Western Front, and he further obtained by the same means a

high degree of mobility which enabled him to effect a rapid advance after breaking through the line, and to exploit an initial success to the fullest possible extent.

The factor of tactical surprise was obtained by avoiding the concentration, prior to the attack, of large masses of troops on the actual battle front, by detraining them at some distance to the rear, and by moving them up to the front of attack by night previous to the assault. The enemy also dispensed with all elaborate preparation for the advance until the attack had actually commenced, while, instead of prolonged artillery preparation, he carried out short bombardments combined with gas shelling of great intensity, and relied for wire cutting on his trench mortars.

The factor of mobility was secured by the tactical training which the enemy was able to give his troops, success being mainly due to the effective co-operation of assault troops, machine-gun detachments and field artillery in pushing rapidly forward, seizing points of tactical importance and immediately widening any gap that was made.

By this means the enemy was, during the course of the Spring and early Summer, able to attain a far greater degree of success than had been previously achieved by any army on the Western Front since the commencement of trench warfare.

During 1918 every effort was made to improve our defences and to prepare for an enemy offensive on a great scale. Owing to urgent representations from the French, however, who anticipated that the Germans were going to attack on their sector of the Western front, and who held much the longest, if the less critical, part of the Western front, the British Army in January took over an additional 28 miles of front. This placed a considerable additional burden upon the British Army, which was still suffering from the strain of the Paschendaele fighting and was short of men with which to maintain its units at full strength. Moreover at this stage it had not yet been found practicable to introduce real unity of command, though the principle that each army should render support to the other in case of need had been fully accepted by the British and French Commanders-in-Chief.

#### *The Enemy Offensive, March 21–July 17.*

Owing to the advantages secured by the enemy in the possession of interior lines, and the consequent uncertainty as to the point of attack, the Allied commanders were compelled to dispose their reserves with a view to meeting an attack either on the British or the French front. On the 21st March the Germans launched their attack with some 64 divisions on a front of 54 miles between La Fère and the Arras-Cambrai high road, the whole of which was held by the British. On the front attacked the 3rd and 5th Armies had only 19 divisions in line with 10 others and 3 cavalry divisions in reserve. The enemy's plans were to break through all our prepared lines of defence on

the first day by a sudden surprise assault, delivered by an overwhelming superiority of infantry, closely supported by masses of artillery and trench mortars; thereafter attacking divisions were ordered to press straight on till they met organised resistance, and they were informed that such resistance would in point of fact be encountered.

The enemy succeeded in breaking through our front north and south of St. Quentin, which compelled our 3rd and 5th armies to undertake a general retirement, and after the third day of the battle the fighting consisted of a series of rearguard actions in which increasing support was lent by the French Army on the southern portion of the battlefield, with the result that the line gradually became stable, but not until our troops had fallen back by March 28th some 40 miles to a line running along the southern bank of the Ailette and the Oise, passing thence south of Noyon and Montdidier, whence it turned northwards along the left bank of the Avre, west of Moreuil and east of Villers Bretonneux, to the Somme. From here the line ran west of Albert along the Ancre to Beaumont-Hamel, and thence to Bucquoy. Since his advance north and south of the Somme was being brought to a standstill, the enemy made a determined attempt to extend his success by widening the front of attack. Accordingly, on the morning of the 28th a fresh hostile attack by some 20 divisions developed on both sides of the Scarpe; it was, however, repulsed with heavy loss to the assailants, and our line from Bucquoy northwards thereafter still kept well to the east of Arras and joined our original front south of Lens. Meanwhile, in order to eliminate the immense advantage possessed by the enemy in unity of command, Marshal Foch had been appointed, on 26th March, Generalissimo of the Allied Armies on the Western Front.

The success of the main German attack, besides greatly lengthening the Allied line, seriously threatened the communications between the British and French Armies, while the casualties suffered by the former, and the consequent depletion of our reserves, added to the seriousness of the situation. However, the German forces in the Somme area were probably also in difficulties, owing to want of communications and the devastated nature of the country, and the failure of the Scarpe valley attack was no doubt a great discouragement. Be this as it may, the fact remains that, whatever the reason, instead of pressing his attack down the Somme Valley, where success for him would have spelt disaster for us, the enemy commenced on the 9th April a fresh offensive in Flanders on the front between Givenchy (some 17 miles north of the Scarpe) and Armentières, and succeeded in penetrating the positions held by the British and Portuguese between these places. This attack was undertaken by some 20 divisions, and would appear to have been originally intended as a subsidiary operation, but the success achieved induced the enemy to make every endeavour to exploit it, with the result that no less than 42 divisions were eventually engaged on this front, and our troops were by the 29th April pressed back to a line

running from Givenchy to Locon, and thence to the Lys river east of Robecq, whence it ran along the eastern edge of the Forêt de Nieppe to Merris. From there the line ran west to Meteren and, bending north-eastwards, ran *via* Locre and east of Kruisstraathoek to the Ypres-Comines Canal. The enemy's pressure south of this Canal had caused us to withdraw our forces in the Ypres salient from the Passchendaele Ridge to a line running *via* White Chateau to Wieltje, and thence along the Pilkem Ridge. In these operations a French detachment of 6 divisions from the Armée du Nord rendered invaluable assistance to our troops.

By this advance the Germans seriously interfered with our railway communications in Northern France, threatened, by their proximity to the Mont des Cats-Scherpenberg Ridge, the right flank of the Allied front between Ypres and the sea, and gained a favourable position for launching a further offensive with the object of capturing the Channel Ports.

As a result of the transfer of French troops to the north, and in order to make the utmost use of all available troops, it was decided to transfer five exhausted British divisions to a quiet part of the French front. Three of these took over the sector astride the Aisne.

Early in May it became evident that the Germans were preparing to launch a third offensive on a great scale. Indications pointed to the probability that this offensive would be made on the Montdidier-Arras front with a view to completely separating the Allied Armies, but, contrary to expectation, the enemy attacked between Rheims and Noyon on the 27th May with 28 divisions, broke through the Allied line on the Chemin des Dames and made a rapid advance to the Marne. It was not till the 4th June that the enemy's advance was definitely checked on the approximate line Rheims-Jonquière-Vincelles; thence along the northern bank of the Marne to a point west of Château Thierry. From here the line ran north-westwards *via* Boussières and Troesnes, along the eastern outskirts of the Forêt de Retz to Le Port on the Aisne, and thence *via* Nampcel to the original line at Sempigny.

The results of this offensive were that the enemy reached points within 42 miles of Paris, and dealt a serious blow to the French Army. The reserves of both the British and French Armies were at this crisis depleted to an alarming degree, while the Germans were believed to be well provided with reserves to launch a new and powerful offensive, though this was only effected at the expense of their other requirements of man power.

On the 9th June the Germans launched a fourth offensive on the Montdidier-Noyon front with some 20 divisions, and by the 12th had succeeded in pressing the French back a distance of about 6 miles in the centre. The French evacuated the salient south of Noyon on the night of the 10th/11th and their line then ran approximately as follows:—Autrechies,



Moulin-Sous-Touvent, Tracy-le-Val, Melicocq, Antheuil, Belloy, Le Fretoy, Le Monchel. By the 13th the German advance was definitely checked, and there is no doubt that the attack, which is believed to have had Compiègne as its objective, did not obtain the success hoped for by the enemy. This result was largely due to the fact that the French were fully prepared for the attack on this sector and that there was therefore no element of surprise.

Although this German effort was a comparative failure the enemy was still believed to retain at his disposal very large reserves and the situation of the Allied Armies gave cause for grave anxiety.

They had so many vulnerable points to defend and so little depth in rear of their lines that it was necessary to disperse their inadequate reserves over a wide extent of front, with the result that they were strong nowhere. The enemy's advance had brought him within striking distance of the Channel Ports, of the main road and railway communications between the British and French Armies, and of Paris itself, and a further enforced withdrawal on the part of the Allied Armies would have exposed one or other of these vital strategical objectives, and would probably have entailed grave disaster.

During this crisis, however, invaluable assistance had been rendered by America, who, disregarding all petty considerations of national "amour propre," had consented to allow American units to be brigaded in British and French formations. Furthermore, realising the dangerous situation in which the British and French Armies had been placed, she had answered our appeal for assistance with a readiness which exceeded all expectation, and had during the summer months been pouring her troops into France, largely in British shipping, at the rate of from 200,000 to 300,000 a month, with the result that by the beginning of July a considerable American force was available to meet the next German offensive.

The fifth great enemy offensive was launched by the Crown Prince's Group of armies on July 15th on a front of some 53 miles on either side of Rheims. On the eastern side of that town, between Prunay and the Argonne, the enemy's attack completely broke down before the main battle positions occupied by the French 4th Army. On the front west of Rheims, between Château Thierry and Vigny, the enemy made some progress and succeeded in crossing the Marne, but his gains were considerably curtailed by a series of counter-attacks on the part of the Allies, and by the 17th of July, the third day of the advance, he had only progressed from 3 to 6 miles, the greatest depth to which he had penetrated being astride the Marne Valley.

During these months of the German offensive our casualties were severe, amounting in all to some 400,000 (of which probably a quarter were prisoners), and we lost in addition nearly a

thousand guns. Losses both of personnel and materiel were, however, quickly replaced, and by the end of this period the British force in France was slightly stronger in men and possessed nearly 700 more guns (including trench howitzers) than before the German attack in March.

*The Allied Counter-Offensive, July 18–November 11.*

In the meanwhile General Foch, who had correctly divined the enemy's intentions, had made every preparation for a counter-stroke on a great scale, for which purpose he had concentrated the bulk of his reserves in rear of the front between Château Thierry and the Aisne. This counter-offensive was delivered by French and American troops on July 18th, and met with complete success; the French secured the heights overlooking Soissons and the Allied advance so gravely menaced the right flank of the enemy's attack east of Château Thierry that he was compelled to undertake an immediate withdrawal to the north bank of the Marne. This was followed by a general advance on the part of British, French, American and Italian troops on the whole battle front south-west of Rheims which compelled the enemy to withdraw from the Château Thierry salient, and under the continued pressure of the Allied forces he was forced by August 4th to fall back to the line of the Aisne and Vesle rivers. In these operations the Italian contingent, which formed a welcome reinforcement in our hour of need, rendered invaluable service. The Allies captured in this fighting between July 15th and 31st 33,430 prisoners and several hundred guns.

The defeat of the Crown Prince's Armies was thus complete, and its consequences proved so far-reaching as to justify the epithet of decisive. Credit for this success, which transformed the whole military situation, and constituted a turning point in the war, must be ascribed first to the supreme generalship displayed by the Allied Commander-in-Chief, who, having correctly appreciated the situation, did not hesitate to transfer the bulk of the Allied reserves, including, with the consent of Field Marshal Sir D. Haig, and the approval of the British Government, a considerable portion of the British reserve, to the point where a counter-stroke would exercise the most immediate and direct effect, at a moment when the Germans still retained a very large reserve force concentrated in readiness for an attack on the British front, and when such an attack seemed in fact to be imminent. This decision, therefore, required a remarkable degree of insight and of courage, and a willingness to take great risks in order to achieve great results, qualities which have always been recognised as the supreme test of generalship, while the choice of the time for the counter-stroke, at the psychological moment when the enemy had committed himself deeply, was exhausted by three days of hard fighting, and had used up the greater part of his available reserves, forms a no less striking testimony to Marshal Foch's leadership. Mere generalship would, however, have availed

little at this supreme juncture had it not been for the splendid resistance of the French troops on July 15th and the following days, and for the reinforcements which the Americans had now supplied to the Allied Armies; nor should it be forgotten that these results could never have been achieved had it not been for the heroic resistance in March and April offered by the British Armies, whose devotion and self-sacrifice, in bearing the brunt of the enemy's first attacks, had afforded the Allies time to reap the fruits of American assistance and of Marshal Foch's generalship. Moreover the willing support rendered by the British Commander-in-Chief at the crisis in July, involving as it did the weakening of his own front at the request of Marshal Foch, and the consent of the British Government to this course, were all important factors in achieving success, and constitute a further proof of that loyal co-operation between all the Allied Armies and countries which has been so signally displayed throughout these operations.

While these operations had been in progress in Champagne the French 1st Army had, on July 23rd, made a successful attack on the front between Montdidier and Moreuil, which drove the enemy from the western bank of the Avre river, and this operation, combined with a series of successful minor attacks, conducted by the British 4th Army, and especially by the Australian Corps, during July astride the Somme, had greatly improved the Allied positions in this quarter, and had reduced the German menace to Amiens and to the lateral communications between the British and French Armies. With the object of exploiting the success achieved in Champagne, and of freeing these communications from all further danger, the British and French forces, under command of Field Marshal Sir D. Haig, undertook an offensive on August 8th on a front of some 14 miles between Moreuil and Morlancourt, supported by a large number of tanks. The enemy was completely surprised, his resistance was overcome with comparative ease, and the front of attack was, after this initial success, extended southwards, the whole of the French 1st and 3rd Armies co-operating on the front between the Oise and the Avre. The enemy, whose reserves were by this time greatly depleted, was compelled to fall back to a line which by August 18th ran a little to the west of Lassigny, Roye and Chaulnes. In these operations between August 8th and 15th over 30,000 prisoners were taken by the Allies.

On this day the French 10th Army on the front between the Aisne and the Oise also took part in the advance on a front of some 10 miles, making substantial progress on the heights which form the western escarpment of the Chemin des Dames. On August 23rd the British battle front was extended northwards nearly as far as Arras, and the advance was subsequently continued by the British and French forces on the whole front between the Aisne and the Scarpe. By the end of the month the British had re-captured most of the old Somme battlefield and the British and French forces had reached the

western bank of the Somme, south of Péronne, and the Canal du Nord, while east of the Oise the French had cleared the high ground between the Aisne and the Ailette, and had established their line along the latter river, thus securing the western portion of the Chemin des Dames plateau.

On September 2nd the British attacked on a front of some 6 miles south of the Sensée and broke through the "Drocourt-Quéant switch line" which formed the western extension of the Hindenburg system, connecting that system with the Lille defences. This important success, which resulted in the capture of 8,000 prisoners, and which was mainly the result of the splendid fighting of the Canadian Corps, led to a general retirement by the enemy on the whole front between the Sensée river and the Somme, to the line of the Tortille and the Canal du Nord.

While these operations had been in progress between the Aisne and the Scarpe, the enemy had been slowly retiring from the salient he had been occupying on the Flanders front between Ypres and La Bassée, and by the first week in September his line in this quarter ran approximately as follows:—Voormezele —Wulverghem —Ploegsteert —Nieppe—Fleurbaix—Laventie—Richebourg St. Vaast—Festubert. Our troops had followed up this retirement with vigour, capturing a considerable number of prisoners.

The progress made by the British Army north of the Somme, combined with the pressure of the French forces between that river and the Ailette, had rendered a further enemy retirement necessary, and the Germans proceeded to fall back along the whole front to the Hindenburg line with the apparent intention of protracting the defence of the latter line, which was of great strength, until winter should put an end to further operations on a large scale and enable them to reorganise their forces and complete their preparations for a further withdrawal, should circumstances render that course necessary, in their own time.

On September 5th and 6th the passages over the Somme were forced on a wide front by the British and French forces, and by the middle of the month the Allied troops had reached at many points their original front-line prior to the German offensive on March 21st. On the 18th the British 3rd and 4th Armies made an important advance on the front north of St. Quentin, which enabled us to occupy a portion of the outpost positions of the Hindenburg system, and our gains in this quarter were further extended on the 24th. Further to the north we continued to gain ground on the front between Gouzeaucourt and the Sensée river in the direction of Cambrai. The result of these successful operations was that we secured positions which enabled us to undertake an attack on the main Hindenburg system under the most favourable conditions.

In the meanwhile important successes had been obtained on other parts of the front. On September 12th the Americans in co-operation with French troops had carried out an attack

on either side of the St. Mihiel salient. The enemy was surprised in the act of withdrawing from this front, and was driven back to a line running across the salient from the Moselle, north of Pont-à-Mousson to Fresnes-en-Woevre, and thence passing by Manheulles, Abancourt and Dieppe to rejoin the original front north of Verdun in the region of Bézonvaux. This important success, by straightening the front between the Meuse and the Moselle, constituted a serious threat to the enemy's lateral communications in the Metz area as well as to the fortress of Metz itself and to the Briey iron district, and formed a direct menace to the flank of the Meuse line.

During the first three weeks of September the French Armies had also made substantial progress on the front between St. Quentin and the Aisne.

On September 26th the Americans and French undertook an attack on a front of some 43 miles between the Meuse and the Suippe, and rapidly overcoming the enemy's resistance made an advance of from 3 to 7 miles along the entire front. The Germans do not appear to have anticipated an attack from this quarter and were taken by surprise. The plans which they had formed for a gradual withdrawal miscarried, and between the 26th and 30th the Allies captured about 21,000 prisoners and 400 guns.

This success was followed on the 27th and 28th by a British attack, in co-operation with American detachments, on a front of 11 miles in the Cambrai sector, which enabled us to force the passages of the Canal du Nord, to penetrate the Hindenburg system, and to reach the outskirts of Cambrai.

On the 28th our 2nd Army, in conjunction with the Belgians, carried out an attack in the Ypres sector between the Wyschaete-Messines ridge and Dixmude, which during the next few days carried the Allied front beyond the Passchendaele ridge, to a line running from Armentières along the Lys to Comines and thence *via* Ledeghem, Oostnieuwkerke, Staden and Werckem to Dixmude. The result of this successful advance was to endanger the enemy's communications with the Belgian ports and to threaten the right flank of the Lille defences. The captures effected by the Allies in these operations amounted to 10,500 prisoners and 150 guns.

On the 29th, on the St. Quentin-Cambrai battle front, the British 4th and 3rd Armies attacked on the whole front of 30 miles from the Sensée river to St. Quentin. On the right we stormed the main defences of the Hindenburg line east of the St. Quentin canal, and in the centre and on the left carried our line forward at all points, crossed the Scheldt Canal, and closely encircled Cambrai on three sides. During these three days' fighting on this front we secured over 22,000 prisoners and 300 guns. Further substantial progress was made on the 30th on the front north of St. Quentin, where the gap in the Hindenburg line was still further extended.

On October 2nd the pressure of our forces on both flanks of the salient occupied by the enemy in the Lille area compelled him to undertake a general retirement on the front between Lens and Armentières; and both these towns, as well as the important Aubers Ridge, fell into our hands.

While these operations had been in progress on the British front the French had been co-operating in an advance on the front west and south-west of St. Quentin, where they had made important progress and had occupied that town. The French 10th Army had on the 28th also resumed the offensive between the Aisne and Ailette, these operations being combined with an advance on the 30th by the French 5th Army in the sector between the Vesle and the Aisne.

The enemy, unable to offer any effective resistance, abandoned the whole of the western portion of the Chemin des Dames Plateau as far as a line running from Bourg *via* Bray-en-Laonnais to Filain on the Ailette, while south of the Aisne he evacuated the whole area between that river and the Vesle, falling back to the line of the Aisne and the Aisne-Marne Canal, which the French reached on October 3rd.

During the first week of October the pressure of the Allied forces on either side of the Rheims salient led the enemy to carry out a further withdrawal on a large scale between Rheims and Auberive, on which front he fell back hastily to the line of the Suippe and the Arne.

During the last week of September and the first week of October the operations in the Western Theatre had assumed a new and very important development, consisting in a general advance along a front of more than 200 miles between the Meuse and the sea. These operations, which were conducted on a scale such as had not previously been attempted since the commencement of trench warfare, had resulted in an advance of several miles along the entire front. In the centre a considerable portion of the Hindenburg line had been captured; while the enemy's flanks had been seriously endangered by the Allied advance west of the Meuse and in the Ypres sector. The enemy's plans for a protracted defence of the Hindenburg system had been completely frustrated, his casualties had been exceedingly heavy, necessitating the disbanding of a large number of divisions which he was compelled to replace by Austrian troops, while his losses in material, which he was unable to make good, seriously weakened his powers of resistance. These factors, which had exercised their inevitable effect on the moral of his troops, exhausted as they were and assailed by superior numbers of Allied troops flushed with success, rendered the situation of the German Army a very dangerous one.

On October 4th the British broke through the Fonsomme-Beaurevoir line of the Hindenburg system north-west of St. Quentin, and on the 8th the long series of battles conducted by the British Army since August 8th culminated in a great

attack on the whole front of 20 miles between St. Quentin and Cambrai which finally drove the enemy from the last line of the Hindenburg defences, with a loss of 12,000 prisoners and 250 guns. The main pivot of the enemy's defensive system in the West was thus completely lost to him and our advance during the next few days seriously threatened, not only the security of his position around Lille, but all his rear lines of defence between the Oise and Meuse, and constituted a grave menace to his main lateral line of communication, the railway running from Lille *via* Valenciennes and Hirson to Mezières.

The immediate effects of this were seen in a retreat of the enemy along the whole front from the Sensée to the Oise of about 11 miles, which gave us Cambrai and advanced our front to the western bank of the Selle river; a simultaneous advance north of the Scarpe permitted us to occupy Lens and Armentières. The line of the Selle was carried on the 13th as a result of bitter fighting, and by the 19th a series of brilliant attacks by the 3rd and 4th Armies had driven the enemy to seek refuge behind the Sambre and Oise Canal, with a loss of over 5,000 prisoners.

Meanwhile the continued pressure of the French and American Armies in the Argonne and on both banks of the Meuse, compelled the enemy to continue his retreat to prepared positions behind the Aisne, Sissonne, and Serre Rivers, positions which had lost much of their value owing to the threat to their right flank and rear afforded by the advance of the Allied Armies to the west bank of the Oise.

On the 14th, when his retreat in the centre had been barely completed, the British 2nd Army in conjunction with French contingents and the Belgian Army renewed the offensive in Flanders along the whole front from the Lys to Dixmude; an advance of about 18 miles in depth was made with slight loss, but with the most far-reaching results—the abandonment of the whole strip of Belgian coast held by the enemy in the north, and a continuation of the retirement between the Lys and the Scarpe in the south, which liberated Lille and Douai from the invader; the Allied force entered these towns, together with Ostend, Bruges, Menin, Courtrai, Roubaix and Tourcoing, amid scenes of the greatest enthusiasm. By October 20th the line in Flanders had halted on the west bank of the Derivation Canal from the Dutch frontier to the outskirts of Ghent, and thence along the west bank of the Scheldt by the western edge of Tournai and the eastern edge of the Forest of Raismes; in a week the enemy had been driven back a distance of 30 miles on a front of 60, and had lost a further 12,000 prisoners and over 300 guns.

From the 20th October onwards the fighting in the gap between the Scheldt and the Oise, which was defended by no strong natural line and which led direct to the Sambre and Meuse Valley, the shortest line of advance into Germany, con-

tinued unremittingly and with increasing violence. This continuous pressure, applied at the most vital point of the enemy's line, inflicted losses on him out of all proportion to those suffered by us, reduced his tired units to mere skeletons and compelled an unceasing drain on his rapidly diminishing general reserve, which had already sunk perilously low. Despite the most desperate resistance, the advance of the 3rd and 4th Armies continued, and had its inevitable effect on the situation to the north and south.

The enemy's position, in fact, was by the beginning of November in the highest degree critical. His shortage of men, now amounting to over 500,000 in infantry alone, and the necessity of continually making head against fresh determined attacks delivered in succession against widely separated portions of his line along a battle front of 250 miles, had compelled him to keep his exhausted and battle-torn divisions in the line for longer and longer periods, while reducing their rest behind the front in proportion; by this time only one division had been out of the fighting for over a month, only 7 for a fortnight, and the average period of rest had fallen to 9 days, thus permitting of no training of the troops nor of any real recovery from their exertions and losses. Further, the battle losses of the enemy since the New Year had reached the huge total of  $2\frac{1}{2}$  million, and all expedients employed, such as bringing over poor troops from the East, reducing the battalions from 4 to 3 companies, breaking up no fewer than 25 divisions to form drafts and bringing into the fighting line in large numbers the last reserves of the 1920 Class, proved quite insufficient to make good this wastage. Divisions were reduced in some cases to under 1,000 from an establishment of 6,750 rifles, and in one case the total had sunk to 783. To this appalling wastage in men was added an equally serious loss of guns and material; the enemy's artillery had been reduced by 33 per cent. since July 15th, and here also he had been unable to make good the wastage. Batteries had been reduced to 3 and even 2 guns; divisions from Russia were being sent into battle unprovided with any artillery at all, and the diminution of the enemy's reply to our gunfire, and the almost entire disappearance of his aircraft from the skies, spoke eloquently of his desperate situation. In fact, the German Army, exhausted, weakened and disheartened by four months of continuous defeat, was in grave peril of complete disaster and disintegration as a fighting force. It had for some time been clear to the enemy High Command and the Government that a continuance of the struggle offered no prospects of any improvement in their situation and carried with it the gravest risks of ruin. On October 25th Ludendorff, as chiefly responsible for this state of affairs, resigned his position as Chief of Staff and went into retirement. The new Government of Prince Max of Baden had since the beginning of October been making overtures to the President of the United States for a suspension of hostilities, and on November 6th they informed Marshal Foch, who had been appointed by the Entente Governments to communicate to properly accredited representatives of Germany the terms on which an Armistice would be granted.



that delegates were proceeding under a white flag to his Headquarters for this purpose.

The decision of Germany to seek for a cessation of hostilities was strengthened by the course of military events from the beginning of November onwards. A final attack by 20 British divisions of the 3rd and 4th Armies between the Sambre Canal and the Scheldt on November 4th, crowning the long series of actions in this area, penetrated right through the enemy's defensive positions, inflicted a loss of 19,000 prisoners and over 450 guns, and compelled the enemy to a retreat which involved the whole battle front from the Dutch frontier to the Meuse. He fell back rapidly in considerable disorder, abandoning quantities of material. The Belgians entered Ghent; the British pushed down the Sambre Valley and entered Valenciennes, Maubeuge and Mons; the French pressed forward to the frontier as far south as Rocroi and reached the line of the Meuse from Chateau Regnault to Sedan, whence the Americans continued the line along the river to Stenay and east of it towards Thionville and Metz. In this last sector Marshal Foch was preparing a strong attack which, together with the continued and vigorous pursuit to the North, rendered a complete disaster to the German Army inevitable.

Moreover, the conclusion of the Armistices with Turkey on October 30th and with Austria on November 3rd had isolated Germany, her southern frontier was now exposed to invasion through the Trentino and the Tyrol, and for the defence of this new front the enemy had not sufficient forces available.

Her domestic situation was serious; disorders and revolts were breaking out on every side; the fleet had mutinied and raised the red flag; and the whole system of internal government was in instant peril of dissolution. Thus Germany, attacked on all sides, deserted by her Allies and racked by domestic convulsion, saw herself driven to accept the conditions laid down for her by the Entente.

The Armistice was signed on November 11th at 5 a.m., and hostilities ceased at 11 a.m. the same day. The terms provided for the occupation by the Allied armies of all the territory west of the Rhine with three bridgeheads over that river at Cologne, Coblenz and Mainz; for the handing over of large quantities of arms, equipment, material and rolling stock; for the release of all Allied prisoners, and for the evacuation of all territory in the East occupied by German troops; for the annulment of the Bucharest and Brest Litovsk treaties, and for the surrender of all enemy submarines and a number of other ships of war.

The Armistice was to last 36 days, to be extended by mutual agreement. The Allied Armies advanced to the Rhine and occupied three bridgeheads on the right bank of the river, in front of Mainz, Coblenz and Cologne; the Germans, however, fell considerably short in the deliveries of material and rolling stock which they were to hand over within 36 days from

November 11th. The Armistice was renewed for another month from December 17th.

The greatest campaign in the military history of this country and of the world, in which the mighty armies of the eight most powerful nations of Europe had for over four years striven for victory, had thus been brought to a triumphant conclusion. Each Ally has its share in the common glory of this achievement, and it may justly be said that to the British contingent there fell, during the last four victorious months of the campaign, the honour of having encountered and vanquished the flower of the German Army in the most important and vital sector of the vast battle-front. To this the figures of British captures, amounting since July 15th to over 200,000 prisoners, 2,850 guns, or one half of the whole Allied total, bear eloquent witness. The skill of British generalship and the valour of British troops have earned the generous admiration of all who have witnessed them, and have won the highest tributes from the Allied Commander-in-Chief.

No small share of the credit for this result is due to the troops of Canada, Australia, New Zealand, South Africa and Newfoundland, who in this final phase of the war proved themselves worthy of the magnificent reputations they had already earned.

### **The Italian Front.**

The winter of 1917-18 was spent by the Italian Army in effecting the reorganisation of their troops and in improving their defences on the Piave line. The rapid recovery of this army after the severe reverse it had suffered in October 1917, is a remarkable testimony to the fighting qualities of the troops, the energy of the commanders and staffs, and the steadfast determination of the nation. By the spring of the present year the Italians showed, by a successful series of minor operations, that they had again gained that ascendancy over the Austrian Army which had enabled them to achieve their earlier successes on the Isonzo. During the early summer increasing indications were obtained that an Austrian offensive was in course of preparation, and when this effort was launched on June 15th it found the Allied forces fully prepared for all eventualities. The Austrian plan, as was shown by various captured documents, was to overwhelm the Allies by a direct attack, on the line of the Piave, combined with a flank attack on the mountain front between the Asiago plateau and the Piave, which would outflank and take in reverse the line of that river and carry the Austrian Army into the plains of Venetia and Lombardy. Encouraged by the successes of the German armies on the Western Front, and confident of achieving equal or even greater success, the Austrians endeavoured to imitate German methods in the concealment of their preparations and in concentrating rapidly on certain selected portions of the front a greatly superior weight of numbers. In distinction, however, to the German plan of massing their reserves against one point and breaking through there, the Austrian attacked at several points along a front of about 70 miles in the

hope of breaking through somewhere, with the result that they were in insufficient strength at all points. On the mountain front west of the Piave all their attacks were repulsed with heavy loss, only insignificant progress being made, and such slight gains of ground as they had effected were soon recaptured in the course of the Allied counter-attacks. On the Piave front the enemy succeeded in establishing himself on the right bank of the river at several points, and during the next few days heavy fighting took place, the Austrians endeavouring to extend their foothold on this bank against the repeated counter-attacks conducted by the Italians. On the 18th, owing to a rapid rise in the river and the carrying away of the greater number of the Austrian bridges, the enemy's situation had become a dangerous one, and although determined efforts were made, and with some success, to re-establish communication with and to reinforce their troops on the right bank, the losses they had suffered, the impossibility of making further headway against the ever-increasing strength of the Italian reserves, which had now been concentrated along the Piave, and the precarious nature of their communications, decided them to undertake a general withdrawal on the 22nd to the left bank, an operation which was completed on the 24th.

Following up their success, the Italians then proceeded to drive the Austrians from the area occupied by them on the Piave delta, between the old and the new branches of that river, and by July 6th the whole of this area was in their hands.

The total captures effected by the Italian Army between June 15th and July 6th were 24,474 prisoners and 63 guns besides large quantities of material. All the artillery and stores which had temporarily fallen into the hands of the enemy were recovered.

The results of this battle were that the Austrians had suffered so heavily, both in a moral and material sense, that they were rendered incapable of any further offensive action; while, on the other hand, the moral effect, not only on Italy but on all the Entente countries, was very great. This success had been obtained when the fortunes of the Entente Powers were at their lowest ebb, after they had sustained three severe reverses on the Western Front, and at a time when the general situation inspired the liveliest anxiety. Moreover, it proved to the whole world that the reverses which the Italian Army had suffered in 1917 had only served to steel its resolution to prosecute the war with undiminished vigour, and that it was as efficient a fighting machine as it ever had been.

This brief summary of events on the Italian Front during the summer would not be complete without some reference to the important services rendered by the British forces. In the complete repulse of the Austrian attack delivered on the mountain front on June 15th the British Army took a very important share, inflicting such heavy losses on the enemy and so effectively completing his discomfiture by a vigorous counter-attack as to paralyse the offensive power of the enemy's troops on this part

of the front. The minor operations conducted by our troops have also been highly successful in inflicting the maximum loss on the enemy at a minimum cost to ourselves.

From July 6th onwards till October 24th operations on the Italian front were confined to raids and minor enterprises, in which the British contingent played their part. Successful raids were carried out by us in the Asiago area on August 8th and 27th, September 11th, October 3rd and October 24th, in which a total of 1,050 prisoners fell into our hands. Meanwhile, two of the British Divisions, the 7th and 23rd, had been secretly transferred to the Piave front and there formed part of the 10th Army under Lord Cavan, which was assigned a prominent part in the final offensive of October 24th. The plan of the Italian High Command was to carry out a simultaneous attack with the 4th and 12th Armies northwards astride the Upper Piave towards Feltre and Belluno in the mountains, and with the 10th and 8th Armies eastwards from the Lower Piave towards the Livenza between Sacile and Portobuffole. The second of these attacks had to be postponed till the 27th owing to floods; but as it turned out, the result was not in any way endangered. The attack in the mountains met with little apparent success, but it proved sufficiently threatening to immobilise the Austrian reserves, the bulk of which were concentrated behind the mountain front between the Piave and the Astico, thus greatly facilitating the task of the Italian right wing in the plains. The 10th Army, on the 24th, seized by a surprise attack the Island of Grave di Papadopoli, taking 700 prisoners and repulsing a heavy enemy counter-attack. This preliminary operation was followed three days later by a large scale attack on a front of 20 miles from the Montello to the Mestre-Pontegruario railway. The enemy put up a strong resistance, but thanks largely to the vigour and resolution of Lord Cavan's 10th Army in a situation which at first was very precarious and difficult, this soon weakened before the steady pressure of the Allies, and had, by the 31st, practically collapsed. The attacking troops had advanced some 13 miles from their starting point, were picking up large quantities of prisoners and guns, and had pushed their cavalry through beyond the Livenza towards the Tagliamento. By the capture of Vittorio all direct communication between the enemy's forces in the plain and those in the mountains was severed; the former were dissolved into a disorganised rabble and the latter, now hard pressed by the Allies who had assumed the offensive in this front, in turn began to give ground rapidly, losing heavily in prisoners and guns in their retreat. The situation of Austria was, in fact, desperate; her armies had suffered a shattering defeat; her subject nationalities were rising and throwing off the yoke of Vienna; her south-eastern front had been laid open, by the collapse of Bulgaria and Turkey, to invasion by overwhelming forces to whom she had nothing to oppose, and her internal confusion cut off her army from all sources of supply and reinforcement. The Austrian Higher Command, therefore, on November 1st, sent a parlementaire to ask General Diaz for a suspension of hostilities and

an armistice was duly signed on November 3rd. At this date the advanced guards of the Allies, driving before them crowds of routed fugitives, had entered Tolmino in the plains and Bozen in the mountains, and collected 450,000 prisoners, including three Corps and four divisional headquarters and 9 divisions complete, and over 6,000 guns. The British 48th Division alone in its pursuit captured 20,000 prisoners and 300 guns, a total far exceeding its own effective strength.

The Allied Army of Italy thus almost exactly a year later, took a complete and decisive revenge for the Caporetto disaster of 1917. This success, swift and staggering in its suddenness and finality, must be attributed partly to internal dissensions behind the hostile front, but still more to the fine leadership of the Allied Higher Command and to the splendid vigour and resolution of all ranks, by which their enemies were out-generalled, out-fought, and beaten to the ground in ten short days. It may be said that Lord Cavan and the British contingent played in these final moments of the campaign a part of which they had every reason to feel proud and which our Italian Allies themselves have recognised with generous admiration and gratitude. By this brilliant victory the Italian people had achieved for all time the complete overthrow of their hereditary enemy and oppressor and had ensured that the remainder of their brothers in blood, so long held helpless beneath alien sway, should be happily reunited to their native land which had seen in their redemption the fulfilment of its historic destiny.

### **Russia and Siberia.**

Peace between Germany and Russia was signed on March 3rd, 1918, and Roumania was compelled to follow suit on May 7th. The enemy, however, in contravention of his treaty engagements, continued to occupy Russia and the Ukraine, where he met with some resistance from a portion of the Polish corps belonging to the former Russian Army. These were, however, soon overcome, and the only organised pro-Entente force remaining in the country was a Czecho-Slovak Corps, composed of troops who had for the most part deserted to the Russian Army and who had borne a notable share in the fighting in the Eastern Theatre. These troops, under the Russian General Dietrichs, determined to continue fighting the Germans, and endeavoured to make their way to Vladivostok, with a view to effecting their transfer to the Western Front. Though the Czechs made it a first principle of their policy to avoid any kind of interference in Russian affairs they were gradually drawn into fighting the Bolsheviks, owing to the latter's aggression. This fighting, which began near Saratov, ended in the rear detachments of the Czechs occupying Samara and Penza. At the same time, the centre of the column became engaged in serious fighting at the end of May in the Cheliabinsk-Omsk region, while the leading troops, 10,000 to 12,000 men with the Commander-in-Chief, succeeded in reaching Vladivostok unopposed. On May 28th, while the remainder of the Czechs were holding a Council of War which resolved to

force a way through to Vladivostok by force of arms, Trotsky was issuing orders that they should be disarmed and sent to prisoner of war camps. In these circumstances, the Czechs were compelled to undertake active hostilities in self-defence. They seized Ekaterinburg, and established themselves on the line of the Volga between Kazan and Samara; while in Siberia they proceeded to fight their way eastwards along the Trans-Siberian railway, with a view to effecting a junction with their compatriots in Eastern Siberia, who in their turn were for the same purpose endeavouring to make their way back along the railway. An independent force under the Cossack Colonel Semenoff also endeavoured to join hands with the Czechs west of Lake Baikal by advancing along the Chinese Eastern Railway towards Chita.

The serious situation of the Czechs, who were now liable to attack by the Bolsheviks from the West, while being cut off from all communication with the Allies by a considerable Germano-Bolshevik force astride the Siberian railway, brought the question of Allied intervention to a head. It was decided that it was imperative to rescue the Czechs to prevent the Germans or their friends from seizing the ports of Murmansk and Archangel and establishing there submarine bases; that it was essential to deny to the Germans the vast resources of Western Siberia which were necessary to them if they were to continue the war; and at the same time to threaten the Germans with a revival of fighting on their Eastern Front in order to compel them to transfer troops back again from the West to the East. Accordingly, Allied detachments were landed at Murmansk and Archangel, and a Japanese force was landed in Vladivostok early in August, which was immediately afterwards reinforced by British, French, Italian and American contingents. With the help of these reinforcements the Germano-Bolshevik forces which held the line between Vladivostok and Lake Baikal were overcome, and contact with the Czech Forces was established on September 1st. This success enabled the Czechs in Eastern Siberia to move westwards to the assistance of their comrades in Western Siberia and Russia, but the situation on the Volga front had in the meanwhile become an anxious one. The Czechs were greatly exhausted, the Bolshevik forces opposed to them were constantly increasing in numbers and efficiency under German instructors, and towards the end of September the Czechs found themselves compelled to abandon the Volga line and to fall back towards Ufa. This retrograde movement was, however, combined with an advance by their right wing in the Ekaterinburg region, which restored their situation in that quarter, where the Bolsheviks were threatening to outflank them, but in spite of this success their position had become by the middle of October an extremely precarious one.

In the meanwhile, the Allied force which had been landed at Archangel on August 2nd had been received with enthusiasm by the inhabitants, and had at once proceeded to push forward up the Vologda railway and the Dwina river. On both lines of

advance they inflicted a series of defeats on the enemy's forces, and by the middle of October had advanced about 200 miles up the Dwina and about 100 miles up the Vologda railway.

In the Murman district the Allied troops, with the help of Karelian levies, defeated the White Finn and German detachments operating in this region in a series of engagements, in which very heavy losses were inflicted on the enemy at very small cost to ourselves, and by the middle of October the whole of Northern Karelia had been cleared of enemy bands.

The victory gained in the Balkans at the end of September profoundly modified the military situation. The Germans were compelled to withdraw the greater part of their forces from Northern Russia, with the result that all danger of an advance on the Murman railway and coast was thenceforth at an end. The situation in Poland and the Ukraine was similarly affected. In the former country the opposition to the Germans at once assumed a more open form, while in the Ukraine the enemy's difficulties, which were already great owing to the widespread peasant risings which had taken place throughout the country, were greatly enhanced, and their communications by land with Sebastopol, where they had established a naval base, were considerably endangered.

On October 18th the Bolsheviks delivered a heavy attack against our advanced troops on the Dwina and drove them back some distance with a loss of 4 guns. Further attacks met with no success. This was the only event of note in the North Russian Theatre, and there was little change in the situation from the Armistice to the end of the year. Strong attacks against our position near Plesetskaya, 130 miles south of Archangel, were repulsed in the first week of December, and we took the offensive in the same sector some days later, when heavy losses were inflicted on the enemy. Good progress was made with the organisation and equipment of the local levies of the Archangel Government. At the end of December a strong enemy attack in the Pinega area forced our troops to retire. Positions have now been taken up about 15 miles S.E. of Pinega. Apart from this only patrol encounters have taken place, usually to our advantage.

On the Czech front, on the other hand, fighting was heavy and continuous. About the end of October the situation of the Czechs, who were very much exhausted and outnumbered, seemed somewhat critical and a retirement of the whole front to the east of the Urals was contemplated. However, the enemy's attacks slackened off and at the end of November the Czechs and their Russian auxiliaries were holding a line from the Urals north of Ekaterinburg, covering that place, thence west of Krasnoi Ufmsk, Ufa and Uralsk, round to the south and east of Orenburg. The attempts of the enemy to gain ground against the southern wing of the Czechs by a concentric advance from south-west, south and south-east against Orenburg met with little success. Attempts to disorganise the rearward communications

of the Czechs along the Trans-Siberian railway by fomenting strikes among the railway employees failed, thanks largely to the vigorous action of a battalion of the Middlesex Regiment under Lt.-Col. John Ward, M.P. Meanwhile, a Russian Army was being raised in Siberia to take over the policing of the railway and the defence of the country, and recruiting proceeded satisfactorily, despite considerable political and internal difficulties.

In conclusion, it may be said that, although the situation in Russia was not yet clear, the action of the British and Allied troops was quite successful in preventing complete German penetration of the country and in holding there considerable bodies of enemy troops who might have been used on the Western front, and thus materially helped to hasten the defeat of Germany in the decisive theatre of war.

At the end of the year, two British, one French and one Italian battalions were engaged in keeping open the Trans-Siberian railway in rear of the Czech-Siberian forces fighting on the Ural front, and a Canadian mixed brigade was en route for Vladivostok, where its advanced parties had already landed. The Siberian Government had by this time succeeded in raising sufficient trained troops to relieve the Czechs on the battle-front, and by December 31st, of the 128,000 troops which were successfully making head against the Bolshevik forces in East Russia and round Orenburg, all but 20,000 consisted of Russian and Siberian contingents. In the North the important centre of Perm was captured on December 24th, but this success was counter-balanced by the loss of Ufa on December 31st.

In *South Russia*, a British Mission was sent to Generals Denikin and Krasnoff and material assistance in the way of munitions and clothing was given.

### **The Balkans.**

No operations of any importance took place on the Balkan Front during the first six months of 1918. General Franchet d'Esperey succeeded General Guillaumat in command of the Allied forces on June 27th, and shortly afterwards, on July 5th, the French and Italians assumed the offensive in Albania and made an advance of more than 20 miles along the greater part of the front between Lake Ochrida and the Adriatic, driving the Austrians from successive positions of great natural strength, and capturing the important road junction of Berat. Pushing on some 12 miles to the north of it, the Allies established themselves on a line running nearly straight from the western shores of Lake Ochrida to the mouth of the Semeni river. During the last week in July, however, the Italians were heavily counter-attacked by the Austrians, who had brought up considerable reinforcements,



and were forced to fall back slowly to the Malakastira ridge north of Valona, a movement with which the French on their right were compelled to conform.

No further fighting on an extended scale took place until September 15th, when the Serbian and French forces assumed the offensive on a front of some seven miles between Vetrenik and Sokol, in the mountainous region between the Cerna and Vardar rivers. This attack met with complete success, mainly owing to the intense vigour of the offensive of the Serbian Army, all the Bulgarian positions being stormed at the point of the bayonet; during the next few days the front of attack was extended to right and left, and by the 19th an advance of some 20 miles had been made and the Allies were threatening the enemy's communications along the Vardar valley and had reached the road connecting this valley with Monastir *via* the Babuna Pass and Prilep. In the meanwhile the British and Greeks had on the 18th and 19th undertaken a series of attacks on the Bulgarian positions on either side of Lake Doiran, which, though comparatively little progress was made, had exercised an extremely important effect on the situation by preventing the enemy transferring his reserves from the Doiran front to meet the main attack further west, a result due to the determination of the Higher Command in persisting, in spite of all difficulties, in the prosecution of the attack, and to the resolution and endurance of the troops of both nations. On the 28th the enemy, whose situation was now greatly endangered, commenced to withdraw along the whole front of 80 miles from Lake Doiran to Monastir, closely pressed by the Allied troops. The retreat was accompanied by much confusion; large numbers of prisoners, guns and quantities of material of all kinds fell into the hands of the Allies, and increasing evidence of the demoralisation of the enemy's forces was obtained. On September 26th a Bulgarian officer was sent, under a flag of truce, requesting an armistice, which was concluded on September 30th, the terms of the convention being the immediate disarming and demobilisation of the Bulgarian Army on the Macedonian Front and the free use of Bulgaria's roads and railways for the movement of British and French troops to the line of the Danube.

In the meanwhile the Allies had pushed on rapidly along the whole front. British troops, advancing through the Kosturino defile into Bulgaria, had captured Strumnitza on September 27th; on the same day the Serbians had entered Veles and Kochane, and on the 30th French cavalry had seized Uskub. The retreat of the Bulgarians had compelled the Austrians in Albania to withdraw northwards, and the French and Italians, following closely in pursuit, reached Elbassan on October 7th.

In spite of the inevitable delays caused by supply difficulties and by the necessity for evacuating the Bulgarian troops, the Allies continued to drive back the enemy northwards, and the German and Austrian forces, hastily transferred from Roumania, the Ukraine and Italy, endeavoured in vain to arrest the Allied

advance. On October 5th the Serbians defeated an Austrian force south of Vranja and occupied that place, and by the 12th Nish, Prizrend and Mitrovitza were all in Allied hands.

Between September 15th and October 12th the Allied armies captured, in the course of the above operations, nearly 90,000 prisoners and over 2,000 guns, exclusive of the troops who had surrendered after the conclusion of the Armistice, other than the XIth German Army.

The Allied advance continued along the whole front from October 12th onwards; the British and Greek troops concentrated north of the Struma Pass, while the Serbians pressed rapidly forward towards the Danube, and the French and Italians on their left progressed along the eastern shore of the Adriatic. On this flank Durazzo was occupied on the 14th, while further east the French occupied Ipek and Novi Bazar, and the Serbians, after severe fighting against the hastily assembled German and Austrian force under Mackensen, pushed it back to the northwards, and finally, on November 1st, entered Belgrade; prior to this, on October 19th, the French had occupied Vidin on the Danube, blocked all traffic on that river, and opened up communication with Roumania. The situation of Mackensen's force was now rendered desperate by the refusal of the Hungarian authorities to supply it or allow it to retire through their territory; so that the conclusion of the Armistice with Germany most probably came in good time to save these troops also from a complete defeat.

Operations against Turkey ceased owing to the signing of the Armistice on October 30th. Preparations had been made for British occupation of the Dardanelles and the Bosphorus, and shortly after the signing of the Armistice Australian and New Zealand troops took over once more the old battle grounds of the Gallipoli Peninsula which had been hallowed by the blood of their countrymen.

In the *Balkans* and on the *Adriatic Coast*, the territories formerly belonging to Austria-Hungary, were taken over by Allied contingents from the Near Eastern Army without any noteworthy incident; serious food shortage in all this country compelled the adoption of widespread measures of relief. Bulgaria evacuated the Dobrudja by the end of the year, Allied troops occupying it pending the decision of the Peace Conference as to its ultimate disposal.

### **Palestine.**

The first six weeks of the present year, 1918, were spent in reorganising our communications with a view to a further advance; the only action of any importance which took place being a series of successful operations by the Arab forces under Sherif Feisal in the area south-east of the Dead Sea, and the investment by the Arabs of Maan, an important railway depot and wireless station. This action by the Arabs completely

severed all railway communication with the Turkish garrisons in Arabia. On February 14th General Allenby resumed the offensive with the object of clearing the country west of the Jordan as far north as Auja river. On February 21st Jericho was captured, and having then established our right flank securely along the Jordan Valley, we proceeded to clear the country northwards. By the third week in March we had reached our objectives west of the Jordan, the ground gained affording General Allenby a sufficient base for operations east of the river which he proposed to undertake with the object of cutting the Hedjaz railway and effecting a junction with the Arab forces advancing up that line.

On March 22nd he effected the passage of the Jordan at a number of points north of the Dead Sea, and our troops fought their way through the rugged and thickly-wooded country on the left bank, meeting with a determined resistance on the part of the enemy. Es Salt was occupied on the 25th, and on the 28th our troops were engaged with a strong enemy force in the neighbourhood of Amman. On the 29th the enemy's advanced positions were stormed, but his main position covering the station proved to be too strongly held to justify an attack upon it with the forces at our disposal, and we therefore withdrew after blowing up considerable sections of the railway north and south of Amman. A detachment was left to hold a bridgehead at Ghora-niyah, on the left bank of the river, and the remainder of the troops were withdrawn to the right bank. In these operations 700 prisoners and 4 guns were captured.

On April 30th a second attempt was made to reach the Hedjaz railway. The plan of operations consisted in a direct attack on the positions occupied by the enemy between Kabr Said and El Haud on either side of the Shunet Nimrin road, about 6 miles east of the Jordan, combined with a wide turning movement by the cavalry round the enemy's right flank. The cavalry, after establishing a flank guard at Jisr ed Damie to prevent any interference by the enemy with this operation from west of the Jordan, advanced on Es Salt, which they reached on May 1st, and after leaving another detachment to hold that place, pushed on south-westwards against the rear of the enemy's forces on the Kabr Said-El Haud line. In the meanwhile the direct attack on the latter positions had made some progress, but on May 2nd the advance of the cavalry south of Es Salt was checked and at the same time the detachment left to hold that place was heavily attacked and forced to give ground. A further frontal attack on the Kabr Said-El Haud position on May 2nd had failed to make any material progress, and to add to the difficulty in which our troops were now placed, the detachment left as a flank guard to cover the crossing at Jisr ed Damie had been driven back with a loss of 9 guns on the night of April 30th/May 1st, and, although, thanks to the coolness and determination of all ranks, the force had been safely extricated from a dangerous situation by a skilful retreat through the ravines of the Jordan Valley, their retirement, by exposing the flank and rear of the cavalry, rendered a

further prosecution of the operations impracticable. General Allenby therefore ordered a withdrawal to the right bank of the Jordan.

During these operations we captured 931 prisoners. Our total casualties did not exceed 1,300, while those of the Turks are known to have been very heavy.

On May 28th, a local operation on a front of some 7 miles between the Jaffa-Tul Keram road and the sea enabled us to advance our line about 2,000 yards and to improve our positions on this part of the front.

On July 14th the enemy attacked our positions on the Abu Tellul ridge west of the Jordan, but was completely repulsed and a successful counter-attack, in which our cavalry made a brilliant charge, enabled us to capture 510 prisoners, of whom 350 were Germans.

During the next two months no active operations took place with the exception of continued raids by the Arabs along the Hedjaz railway, in which considerable damage was done and severe losses were inflicted on the Turks. Maan was closely invested and the garrison reduced to serious straits.

By this time the Turkish forces in Palestine had been much reduced owing to the transfer of troops to the Caucasus and Persia, where the enemy's main effort was being made. In the meantime the reorganisation of our own forces had been completed and a favourable opportunity was offered for striking a blow at the enemy.

On September 18th our troops carried out a preliminary attack in the sector immediately west of the Jordan with a view to gaining access to the enemy's system of roads leading north-westwards from El Mugheir towards the Bireh Nablus road. All our objectives were reached, and a favourable position was gained whence a further advance could be carried out with the object of intercepting the enemy's lines of retreat from the western to the eastern bank of the Jordan. On the early morning of the 19th the main offensive was delivered on a front of about 16 miles between Rafat and the sea, with the result that the enemy's right wing was completely overwhelmed, and through the gap thus created in his line three cavalry divisions, which had previously been concentrated in readiness in rear of our left wing, were launched in a wide turning movement round the enemy's right flank with a view to completely intercepting his communications. Tul Keram on the railway, the Turkish advanced base, and the junction of several roads leading northwards and westwards, was reached in the afternoon, and the cavalry then divided, part moving due eastwards on Nablus, while the remainder moved north-eastwards in the direction of El Afule and Beisan. In the meantime an Arab detachment which had been sent northwards by Feisal up the Hedjaz railway had cut the railways round the junction of Deraa, while Feisal himself

had inflicted a defeat on the enemy at Tafle, south-east of the Dead Sea. On the 20th the cavalry reached Nazareth, El Afule and Beisan, thus completely intercepting all the enemy's lines of retreat west of the Jordan. In the meantime the whole British line was pressing on, driving the enemy into the arms of the cavalry, who by the 21st had secured the crossing over the Jordan at Jisr ed Damie, thus cutting the enemy's only remaining means of escape eastwards. On the 22nd General Allenby reported that the 7th and 8th Turkish Armies had practically ceased to exist. Operations were continued with the utmost vigour, with a view to preventing the escape of the 4th Army east of the Jordan. Amman, on the Hedjaz railway, was reached on September 25th, and our cavalry pushed on towards Deraa, leaving a detachment to intercept the retirement of such Turks as were still south of Amman. On the 29th the entire Turkish force south of that place, amounting to about 5,000 men, hotly pursued by Arabs, who had already captured Maan, surrendered to our cavalry.

In the meantime the advance had been continued west of the Jordan. Tiberius, as well as Semah and El Sama, south of the Sea of Galilee, were occupied on the 25th, and the cavalry were then concentrated on the line Tiberius—Nazareth—Acre, preparatory to a general advance on Beirut and Damascus. On the 28th we secured the crossing over the Jordan at Jisr Banat Yakub, north of the Sea of Galilee, and on the same day our cavalry, advancing up the Hedjaz line, secured Deraa and effected a junction with the Arab forces at that place, who had already captured 1,500 prisoners. Damascus was surrendered on October 1st, together with 7,000 prisoners, and on October 6th the important railway centre of Rayak, the railhead of the standard gauge line from Aleppo and the junction of the railways to Beirut and Damascus, fell into our hands. On the 7th our infantry occupied Beirut. Between September 19th and October 8th our total captures amounted to over 75,000 prisoners and 300 guns. Of the prisoners, over 3,000 were Germans and Austrians. Of the three Turkish Armies engaged, it was reckoned by General Allenby that not more than 17,000, including line of communication troops, had escaped.

This decisive victory, which freed Palestine at one blow from Turkish dominion, exercised a profound effect on the military and political situation. Coinciding, as it did, with the Bulgarian disaster in the Balkans, it placed the Turkish Empire in a position of great peril, compelling the Turks to abandon all their schemes for the penetration of Persia and Central Asia. It exposed Syria, with all its pro-Ally elements, to invasion, and endangered the communications of the Turkish forces in Mesopotamia. It contributed to the Bulgarian collapse, and lowered the morale of the Austro-Hungarian and German Armies and peoples. In a word, it transformed the whole military situation throughout the Asiatic Theatres, and its political and moral effects in every theatre of war were of a far-reaching nature.

General Allenby decided to press the pursuit of these remnants of the Turkish Syrian Army with the utmost vigour. Our cavalry moved northwards on the heels of the fugitives, reaching Baalbek on October 11th, Tripoli on the 13th and Homs on the 15th, all without any resistance. From this point armoured cars were pushed forward to Aleppo, which was entered on October 26th, the enemy falling back to Katma, the junction of the roads to Alexandretta and Adana; the Arab Army occupied the junction of the Bagdad railway at Muslimie. This was the situation at the moment of the signing of the Armistice with Turkey on October 30th.

The capitulation was the logical outcome of the general situation in Europe, which had cut Turkey off from the assistance of her Allies, and abandoned her to her own resources at the very moment when she was being pressed hard on both her Eastern fronts by the British Armies under Allenby and Marshall. The former had succeeded in the most striking manner not merely in gaining a victory, but in making the fullest possible use of it; and the vigorous and well sustained pursuit of the fragments of the Turkish Army of Syria, which prevented them from rallying and making a fresh stand on any of the many favourable positions between Nablus and Aleppo, and gave us the latter place after a march of over 250 miles in 35 days in face of immense difficulties of supply and over the most difficult terrain, was in every way a model of conception and execution. The complete liberation from Turkish rule for all time of the historic fields of Syria and the Holy Land thus formed a fitting reward for the skilful and resourceful leadership of General Allenby and the endurance and valour of all ranks of the Palestine Army which, it must not be forgotten, included a considerable proportion of Indian and Australasian troops, in addition to small French and Italian contingents.

The Turkish troops in Arabia, cut off as they were from communication with Constantinople, were not at all disposed to comply with the terms of the Armistice; those in the Lahej area close to Aden surrendered after much procrastination; there was some fighting at Hodeida, and at the end of the year Fakhri Pasha, the Turkish Commander, was still holding out in Medina.

### **Mesopotamia and Persia.**

The collapse of Russia had, by the beginning of the present year, profoundly altered the situation in the Middle East. Germany, whose road to the Persian Gulf and Central Asia had been effectually blocked by the efforts of the British in Mesopotamia, and of the Russian forces in Persia and Armenia found her path no longer barred towards these regions, and an opportunity was afforded her, with the aid of her Turkish Allies, of gaining control over the Black Sea, and by penetrating the Caucasus, Persia and Trans-Caspia, to outflank the British position in Mesopotamia and to threaten Afghanistan and India. It was hoped that this danger could be met by organising resistance on the part of the Armenians, Georgians and other races of the

Caucasus, and by a British advance from Baghdad to the Caspian with a view to co-operating with these forces and barring Turkish progress in Persia. The first of these hopes proved vain. The Georgians came to terms with Germany, the Tartars and other Mohammedan elements for the most part threw in their lot with Turkey and such Armenian troops as remained were overwhelmed by superior numbers. Our second aim, however, the extension of the British right wing in Mesopotamia to the Caspian Sea, was successfully carried out.

Before dealing with this expedition, it will be well to recount briefly the course of events in Mesopotamia. Nothing of importance took place in this theatre until early in March, when we commenced an advance up the Euphrates, occupying Hit on March 9th without opposition. On March 26th our forces on this line of advance carried out a surprise attack on the Turkish detachment holding Khan Bagdadie, 22 miles north of Hit, and surrounded the garrison. After an unsuccessful attempt to break out on the night of 26th/27th, the whole force, consisting of some 4,000 men and 10 guns, surrendered. The pursuit was carried out to a distance of 73 miles beyond Ana and several hundred more prisoners and large quantities of material were secured. This success resulted in the complete destruction of the enemy's forces on the Euphrates. On this river-line extensive preparations had been made by the enemy in the previous winter, showing that it was his intention to undertake an offensive on Baghdad, a plan which, however, did not mature.

On the 24th April we commenced an advance from our positions on the DIALA in the direction of Kifri and Kirkuk, with a view to inflicting losses on the Turks and ensuring the security of our line of communication by road between Baghdad and Kermanshah. The enemy's resistance was overcome with comparative ease, and our troops pressing on, captured Kifri on April 28th, entered Kirkuk on May 7th and pursued the enemy as far as the Lesser Zab. In these operations we captured about 2,000 unwounded Turks and 15 guns, completely defeated the 2nd Turkish Division, drove back its remnants in a demoralised condition beyond the Lesser Zab and secured our own communications between Baghdad and Persia from all danger of molestation. The escape of the Turkish forces was facilitated by the heavy rain, which delayed our progress and greatly added to the arduousness of the operations. The retention of Kirkuk and Kifri did not form part of our plans, and having secured all the objects with which our advance had been undertaken, our forces were withdrawn at the end of May to our advanced bases on the DIALA.

To return to events in Persia. Our progress along the Baghdad-Kermanshah-Hamadan-Resht road to the Caspian was greatly delayed during the winter and spring by the snow in the Pai-tak Pass, by the defective nature of the road, and by the lack of supplies in the country through which our advance lay, and it was not until June 14th that a Russian partisan detach-

ment co-operating with our troops was able to establish itself in Resht. Even then, however, our difficulties were not over, as the Jangali tribesmen continued to offer considerable resistance to our advance, and some severe fighting took place, as a result of which we eventually arrived at an understanding with them and secured access to the port of Enzeli on the Caspian.

About this time, in order to prevent hostile penetration into Turkestan, we sent a mission into Transcaspia *via* Meshed. This was based on India and was supported by Indian troops, and eventually obtained control of the Trans-Caspian railway between Merv and Krasnovodsk on the Caspian.

In the meantime the Turks and Germans had been making rapid progress in the Caucasus and were now investing Baku. They had also pushed southwards into Azerbaijan; they had entered Tabriz on June 14th, and were engaged in attempting to organise the pro-Turk elements in that region. Towards the end of July the anti-British Bolshevik faction at Baku was overthrown and a Russian and Armenian Government was established which decided to appeal for British assistance. On July 24th, Bicharakhoff, who had already arrived at Baku, sent a message to the effect that ships would be sent to Enzeli to transport a British force to Baku; on July 26th these transports arrived and a British detachment embarked early in August and was followed by other troops. Every effort was made to organise and secure cohesion between the troops of the different nationalities composing the garrison, but the fighting which ensued during August showed the unreliability of the local levies and the consequent improbability that the garrison would be able to meet a serious Turkish attack. Severe fighting took place on August 17th and 26th and on September 1st, and on the two latter occasions our troops, being left to bear the brunt of the enemy's attack unsupported, were forced to fall back. On the 14th September the enemy again made a determined attack; fighting lasted for 16 hours, the brunt of which was once more borne by the British, and as the further defence of the town had now become impracticable, our troops were withdrawn in safety on the night of the 14th to Enzeli.

Our object in sending an expedition to Baku was not to occupy that place permanently, but to prevent the oil wells falling intact into the enemy's hands and to secure control over the shipping on the Caspian. It was always recognised that the venture was a hazardous one, but the prospect of accomplishing these objects appeared to render the risks worth taking. The first object we failed to gain, but the second, which was of very great importance in checking a further Turkish advance in the Middle East, was successfully achieved; the Caspian Fleet threw in their lot with us, and the command of the sea was ensured.

Our withdrawal from Baku had rendered our situation in Persia a somewhat difficult one. In spite of the establishment of a friendly Persian Government, our lack of success in the Caucasus and the continued advance in Azerbaijan of the Turks, who were



now seriously threatening our communications by an advance from Tabriz towards Kasvin, produced an unfavourable political and moral effect, and these were aggravated by the disturbed condition of the country in the South, where a mutiny in the South Persian Rifles and a rising among the local tribes at Shiraz had been with difficulty suppressed.

The great victory secured by General Allenby in Palestine and the Allied victory in the Balkans, however, transformed the whole military and political situation in the Middle East. The Turks were compelled, towards the end of October, to transfer a large number of troops in the utmost haste to Constantinople, and to reinforce their 6th Army in Mesopotamia from their forces on the Persian frontier. The threat to our communications between Baghdad and the Caspian was removed, and all serious danger of German and Turkish penetration in Persia and Central Asia was at an end.

The final blow at the Turkish Mesopotamian Army was, however, delivered by General Marshall. The offensive on the Tigris front was resumed on October 27th; the Turkish force under Ismail Hakki Pasha was attacked in front by our infantry, while its retreat was cut off by cavalry and armoured cars working round its left and rear. The infantry pushed resolutely forward despite vigorous hostile resistance in strongly prepared positions, and drove the Turks into the arms of our mobile forces who had blocked the lines of retreat; on the 30th, the Turkish commander, seeing his position was hopeless, surrendered with all his force, numbering 7,000 men. This surrender was completed just before the general Armistice with Turkey was signed.

Among the conditions of the Armistice were the evacuation of all portions of North West Persia and Trans-Caucasus still held by Turkish troops, and the Allied occupation of Batum and Baku.

A British division was ordered to the *Caucasus* in December to enforce the evacuation of the Turkish Army there, and to keep the peace in that country amid the various warring nationalities. The division was to occupy the Baku—Batum—Tiflis railway and to keep open the communications *via* Krasnovodsk of the British detachment in *Trans-Caspia*. An attack on the Bolshevik ships from Astrakan by our fleet of improvised gunboats was successful, and the enemy as yet has made no serious effort to challenge our command of the Caspian.

The Mesopotamian campaign, which had seen so many vicissitudes of fortune, had finally resulted in the complete expulsion of the Turk from the fertile land he had so long misgoverned, and the utter downfall of the Eastern plans of Germany. General Marshall had proved himself in every respect a worthy successor of General Maude, and had thoroughly secured and consolidated the results of the latter's excellent generalship. It was most fitting that these brilliant deeds of the Mesopotamian Army which, it should be noted, consisted largely of the seasoned troops

of the Indian Empire, should have been crowned in the last moments of their arduous campaign by a victory as well conceived as it was complete.

### **East Africa.**

During the greater part of the present year our forces were engaged in an attempt to prevent the enemy making his way back to German East Africa and to drive him into the angle between the Zambesi river and the coast. By the end of June his forces, who were greatly reduced by incessant fighting and sickness and were short of ammunition, were in a critical position in this area, whence escape appeared difficult. The thick bush, however, assisted the enemy to elude our columns, and the natives in Portuguese territory lent him aid, while the capture of a number of Portuguese posts containing ammunition and stores enabled him to prolong his resistance. Early in July he succeeded in doubling round the eastern flank of our line in the district west of Quilimane, and proceeded to make his way northwards. On September 28th and 29th he recrossed the Rovuma river into German East Africa about 40 miles east of Lake Nyassa, and after an engagement with a detachment of Northern Rhodesian police he moved westwards round the flank of this force and headed for Ubena north-east of Lake Nyassa.

He left this place on October 18th, moving north-west, and leaving behind him General Wahle and other sick in hospital. Our forces followed about a day's march behind; he then broke back to the southward and, passing into Rhodesian territory, attacked Fife on November 2nd, but failed to take it. He then moved westwards towards the southern end of Lake Tanganyika, fighting rearguard actions with our pursuing columns as he went.

The terms of the Armistice were communicated to Von Lettow at Kasama on November 14th and accepted by him. The German forces were marched to Abercorn, and there surrendered on November 25th to Brigadier-General Edwards, acting for General Van Deventer. The total of personnel and material taken over amounted to 30 officers, 125 Europeans, 1,168 native soldiers, 1,522 porters, 1 field gun, 23 machine guns, 14 Lewis guns, 1,071 rifles, 100,000 rounds S.A.A. and other material. In consideration of their gallant defence the swords of Von Lettow Vorbeck and his fellow-officers were handed back to them; steps were taken to repatriate the native prisoners, and the Europeans were sent to Bismarcksburg to await transport to Dar-es-Salaam.

Thus the last fighting force of Germany in the Great War laid down its arms. The forces under General Van Deventer, made up almost entirely of local troops raised from the British colonies of Africa, had carried out a difficult and thankless campaign under the most trying conditions with unfailing energy and spirit, and their efforts had at length been crowned by the extinction of the last remnants of the German Colonial Empire in Africa.

## Conclusion.

On November 11th, 1918, with the complete submission of all the hostile armies, the military share of the British Empire in the world war came to an end. The four years and four months which have passed since she first drew the sword have been filled with such a roll of glorious endurance and mighty achievement that the best efforts of history cannot hope to recount it as it deserves. This Empire succeeded in raising, equipping and handling during this period such numerous and wide-scattered hosts as were never before dreamed of by soldier or statesman. These hosts were created not only from the great forces raised in Great Britain and Ireland but also from those who flocked from Australia, New Zealand, Canada, India, the Crown Colonies and Dominions; in a word, from all the lands and all the races owing allegiance to the flag of England and inheriting the tradition of her military glory. In every theatre of the world war British soldiers have borne their part—a part often thankless and toilsome, but always, too, worthy and heroic. British leadership has never stood higher; British valour has never shone more splendidly; the fame of British arms has never been more universal than at this moment. The tale of this effort and this triumph will never, and can never, be fully told; but however much of all that deserves to be remembered may be omitted or forgotten, the part played by our Army in the Great War will be counted in every respect worthy of the Empire which sent it forth to battle, and of the great causes of which that Empire is the victorious champion.

Finally, no record of the military achievements can fitly close without a tribute to the untiring efforts of the British Navy which by its devoted heroism has made those achievements possible.

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## Part II.

### Administrative Work.

While the titanic battles described above were being waged by the Armies of the Empire in various parts of the world, the more prosaic, but none the less necessary and difficult, task of providing the fighting men with all their requirements was quietly and efficiently going forward. Such work as this lends itself ill to the descriptive pen, and the elements of interest and dramatic action are of course lacking; none the less, without the continued labour of hand and brain employed in the colossal task of maintaining a modern army, victory would be out of reach. The present day war machine keeps for every two men fighting in face of the enemy, one in rear to supply their wants, and bearing this in mind, it is necessary to set to work to give a short and necessarily inadequate sketch of the vast and varied labours of the Army Departments during the year 1918. The following will give some idea of the immense volume and variety of administrative work involved in the raising, equipping and maintenance of the British Armies in the field.

During the 12 months ended on the 31st August, a total of 628,900 infantry drafts were despatched to the forces in the various theatres. Of these, 157,400 were despatched during the period March 21st to April 30th, 1918. A feature of the drafting to France during the period March to August was the inclusion of men between the ages of 18½ and 19. The number of these was 65,000. On September 1st, the normal minimum age of 19 years was reverted to. An attempt was made to meet the constant demands of the technical corps for skilled personnel by the training of men of low medical category for these corps. To this end, an Artificer dépôt was formed where such men could be trained at their trades; a certain number of such men were loaned for limited periods for productive employment in munition works. They were thus at the same time training for service in technical corps and engaged in productive work.

During 1918 the work of providing quartering for the troops was one of great difficulty, and at times of very serious anxiety owing to the large number of American troops in England in addition to our own forces. There were, on an average, over 1½ millions of troops and labour formations in the country; and besides this a hospital population amounting to between 300,000 and 400,000.

A considerable strain was thrown on the Supply Branch by the despatch of the Expeditionary Forces to Italy and North Russia. In Italy the chief difficulty at first was caused by a shortage of railway rolling stock, which was burdened with the transporting of urgently needed troops to the Italian theatre. For the time being this interfered with the regular flow of supplies to the Mediterranean Expeditionary Forces by the Overland route (Cherbourg—Taranto), but the difficulty was overcome in due course by means of special shipment by sea. The difficulty with regard to the North Russian Expeditionary Force was not so much the question of providing and shipping the supplies required by the Military Forces in this theatre, but rather the fact that it was also found necessary to provide food for the civilian populations of Murmansk and Archangel. The quantities of foodstuffs required by the latter were considerable, and far in excess of those necessary to maintain the Military Forces. In regard to the feeding of the Allied troops in this theatre, all arrangements were made by the British Government. In consultation with Sir Ernest Shackleton and the Medical Authorities, special scales of rations were drawn up suitable for the cold climate. The chief difficulty was the factor of time, as all arrangements had to be completed in a few weeks to maintain our Forces in Archangel over a period of seven months, as the harbour is frozen up from December to June. In addition to supplying large quantities of foodstuffs, petrol, coal, etc., to the Allies, the War Office was called upon to undertake during the last year the provision of all the necessary foodstuffs for the Greek Army in the war zone. This was in addition to finding half the requirements of the Serbian Army.

To provide for increased establishments of artillery and their maintenance in the field, as well as for making good the heavy losses sustained in March, the number of guns shipped to France during the year was as follows :—

Anti-aircraft Guns	...	...	...	425
Field Guns	...	...	...	3,750
Field Howitzers	...	...	...	1,276
Medium Guns	...	...	...	1,145
Medium Howitzers	...	...	...	1,956
Heavy Guns (excluding those on rail-way mountings)	...	...	...	279
Heavy Howitzers	...	...	...	354
				<hr/> 9,185 <hr/>

In addition to meeting the requirements of our own forces in the various theatres of war, large numbers of gun and howitzer equipments have been handed over to the Allied Armies and provision made for their upkeep. Besides providing for the unprecedentedly heavy demands of ammunition for use of our own Armies, large quantities were supplied to our Allies, and considerable numbers of rifles were issued to the earlier American Divisions on arrival in France. During the period under review there was a considerable expansion in the employment of machine guns involving a greatly increased supply over that for the year 1917, as the following table shows :—

	Vickers.	Lewis.	Hotchkiss.
Guns with troops—1st Jan. 1918	8,126	22,870	4,393
" " " 30th Sept. 1918	11,884	41,888	10,337
Increase	3,758	19,018	5,944
Percentage increase	46	84	135
Losses replaced during period	4,457	11,686	1,209
Assistance to Allies	5,536	4,158	730

During the year the extended use of gas in warfare resulted in largely increased demands for supplies of gas shell and other appliances both for offensive purposes, and also for anti-gas defence.

During the year, the total number of tanks delivered to the Army was as follows :—

Heavy Tanks	...	...	992
Medium Tanks	...	...	190
Auxiliary Tanks	...	...	177

Up to March, 1918, the type of Heavy Tank was little different from that originally used at the Battle of the Somme, 1916. It was underpowered and difficult to control. In March, 1918, deliveries began of a new type which had one man control and increased engine power and proved a great success. The Medium Tank known as the "Whippet" is a faster machine than the Heavy Tank and armed with machine guns only. It proved its efficiency in the later operations. Auxiliary Tanks, either those designed as Gun Carrier Tanks or Supply Tanks, did good work in transporting ammunition and supplies for fighting Tanks and also for other Branches of the Service. The losses in Tanks during the year under review were approximately as follows :—

Heavy Tanks ... ..	546
Medium Tanks ... ..	30
Auxiliary Tanks ... ..	65

The facilities for the repair of Tanks in France were extensive and complete. More than 90 per cent. of the Tanks damaged in action were capable of being repaired and re-issued.

The demands for Medical Personnel for the various theatres of war, were, owing to increased lengths of Lines of Communication, and the severe fighting, very heavy. Some 13,000 officers, 25,000 nurses, and 128,000 N.C.O.'s and men of the R.A.M.C., were employed at home and abroad. The health of the Army was good, the incidence of sickness amongst the troops at home being 423 per 1,000 per annum, and in France 607 per 1,000 per annum. The sick rate would have been considerably lower but for the widely spread epidemic of influenza. Large numbers of men arriving in American and New Zealand transports were found to be suffering from the disease, and Committees of Experts were appointed to investigate its causes and prevention. During the year some 20,000 men were sent from Salonika under a scheme by which men suffering from malaria were brought home to special Concentration Centres for medical and physical treatment. The number of equipped hospital beds in the United Kingdom was increased during the year from 318,000 to 357,592. The number of cases in hospital were as many as 293,000, including men discharged from the service, pensioners, and men who, although probably unfit for further service, were being retained in military hospitals owing to the lack of civilian accommodation. It was found necessary to increase very considerably the hospital accommodation for prisoners of war in this country. In October there were nearly 10,000 prisoners of war as patients in hospital; these were treated and cared for in a manner precisely similar to that accorded to British patients. Many new inventions, remedies and methods of treatment were tried and adopted during the year. Upwards of 3,000,000 doses of serums and 6,000,000 doses of vaccines were supplied during the year to the British Armies. Serum for protection against gas gangrene, as well as tetanus, was elaborated and tried on a large scale.

The Remount Service may be said to have reached its highest point of expansion prior to 1918. This is shown by the diminution in numbers of animals in all the theatres of war—horses, mules, camels, donkeys and oxen—from December 31st, 1917, to the same date in 1918. Thus the grand total fell slightly from 878,352 to 761,023. An interesting indication of the position during the twelve months, showing as it does how the wastage was steadily met, apart from the sales of surplus animals subsequent to the signing of the Armistice on the 11th November, is afforded by the following table :—

—	On 31st Dec., 1917.	On 31st Dec., 1918.	Approximate percentage of wastage.
United Kingdom ... ..	129,223	74,940	15·0
France ... ..	414,450	377,180	26·0
Egypt ... ..	136,008	135,269	14·0
Salonika ... ..	68,197	58,311	6·10
Mesopotamia ... ..	84,684	84,935	5·79
Italy ... ..	29,823	17,624	12·0
Aden ... ..	1,176	5,991	—
East Africa ... ..	14,791	6,773	—

During the year 18,727 horses and mules were landed in the United Kingdom from North America and 568 were landed direct in France. To meet the heavy wastage in France caused chiefly by losses in the months of heavy fighting no fewer than 93,600 horses and mules as remounts were sent from England to France. A few of those proceeded on to Egypt and Italy. The number of horses purchased in the United Kingdom during 1918 was 27,272. Immediately after the Armistice was signed purchase in North America and England was stopped, as also were further shipments of animals from North America to England and from England to France. Attention was then directed to disposing of the surplus animals, and up to the end of the year 19,500 had been sold in the United Kingdom, 7,600 from among those already purchased and awaiting shipment in North America; 2,500 in France, and 1,200 in Italy. The standard of health of the animals at home and in all theatres steadily improved, with the result that the general *inefficiency* rate fell in a very marked manner in spite of the heavy strain caused by military operations. This high standard of efficiency was the result of the constant training in animal management inculcated by all ranks of the Army Veterinary Service and constant representations on all matters connected with the health of animals. The number of animals under treatment in Veterinary hospitals at home and in all theatres of war fell from 82,157 on the 31st of December, 1917, to 50,351 at the end of October, 1918. While the figures of animal inefficiency and mortality from disease showed a steadily decreasing rate both at home and in all theatres of war, the total

loss in some theatres showed a very marked increase. This was especially the case with the British Expeditionary Force, France. This increase was due to the very considerable rise in battle casualties—the result of constant shelling of roads and billets behind the lines and aerial bombing of horse lines, etc. Thus, the percentage of total animal loss per annum in the British Expeditionary Force, which for the years 1915 and 1916 was just under 12 per cent., rose in 1917 to 27 per cent., and at the end of hostilities in 1918 reached 28 per cent. per annum. Besides the numbers actually killed or so severely injured that they had to be destroyed, large numbers of animals were wounded; the treatment of these wounds has been improved by the great advancements made in surgical methods in the various Veterinary Hospitals.

The growth of the Mechanical Transport has been continuous; experience during the year still further goes to prove the enormous value of Mechanical Transport, which continued to be employed in various new ways in substitution for horses and other methods. At the end of 1918 the numbers of vehicles and personnel employed were as follows:—

Personnel ... ..	173,570
Four-wheeled vehicles ... ..	85,138
Motor cycles ... ..	34,711

The responsibility of the War Office in connection with Mechanical Transport increased greatly owing to the agreement arrived at whereby Mechanical Transport for all Government Departments, including the R.A.F., should be supplied through the War Office, and also to the fact that demands from all Allied Governments increased considerably during the last 11 months of 1918. The American Army alone were supplied with a large number of vehicles (4,000–5,000). The general shortage of personnel affecting the Army as a whole and the urgent need of men for the fighting arms, brought about considerable changes in Mechanical Transport. Large numbers of Mechanical Transport men, both at home and abroad, were transferred to the Infantry and other fighting arms, their places being taken by natives, women and men who, through wounds or other causes, were found unfit for other services. Steps were taken to form a Bureau of Technical Intelligence, the function of which was the collection, collation and classification of all technical data obtainable from the operation and the maintenance of Mechanical Transport under War conditions. The experience of these years' operations, which have put Mechanical Transport to a very severe test, has improved the efficiency of this service; the wastage in men, vehicles and spare parts has been enormous, but everything has been made good in a very short time from reserves in England. The tendency to substitute Mechanical Transport for Horse Transport was more and more marked, and experiments in the transportation of Field



Guns and Machine Gun Battalions by Mechanical Transport were made. Mechanical Transport developed enormously in eastern theatres, and worked successfully under such conditions as were thought impossible in pre-war days. Many difficulties were overcome, and most valuable experience was gained in the use of Mechanical Transport in tropical and undeveloped countries. The following table may be of interest :—

	France.	Italy.	Salonica	Egypt.	East Africa.	Mesopotamia.	North Russia.	Other Services.	Total.
Four-wheeled Vehicles.	42,678	2,112	4,407	3,822	3,243	5,369	75	23,432	85,138
Motor-cycles.	14,438	797	663	1,437	830	1,266	28	15,252	34,711

There were heavy demands for vehicles principally for equipping American Divisions in France, and also to make good the losses and wastage both of our own and to a certain extent of Allied armies.

The Transportation work was much increased during 1918, owing to the rapid increase in the number of troops arriving from the United States up to the date of the signing of the Armistice with Germany, the many moves from one theatre of war to another, the despatch of Forces to Murmansk, Archangel and Vladivostock, the increase of work in connection with the Demobilisation arrangements, and the bringing home of the large numbers of prisoners of war. Over 230,000 tons of military stores as well as personnel frequently exceeding 100,000 were shipped each week to the various theatres of war and India. The return of ammunition and empty cases, guns and carriages and war salvage generally averaged between 8,000 and 10,000 tons a week. During the year two important additions were made to the Cross Channel and Home Service fleet which now totals over 380 craft. Steel barges, capable of carrying 1,000 dead weight tons, have been and are being built and have proved very satisfactory. Train ferry services were inaugurated in the early part of the year and several steamers were put into commission. Special terminals were constructed on both sides of the English Channel for these steamers which would carry as many as 54 loaded wagons on their own wheels. A large fleet of tugs, barges and similar craft is being maintained by the British Expeditionary Force upon the canals and rivers of Northern France, now totalling over 950 vessels mainly engaged in the handling of nearly 60,000 tons per week and the transport of numerous personnel. A still more extensive fleet has been operating upon the Rivers Tigris and Euphrates in Mesopotamia, now amounting to over 1,650 craft of all kinds. Throughout the

year 1918 the tonnage carried averaged between 35,000 and 40,000 tons per week. In Egypt up to 37,000 tons a week were carried on the canals and River Nile by a fleet of more than 400 vessels exclusive of hired native craft, the latter ranging in number during the year from 550 to about 1,700, according to the requirements of the traffic. Large quantities of railway material were supplied during the year to the various theatres of war from this country, India and America. By the end of November, 2,735 miles of track, 1,181 locomotives and tractors, and 28,370 wagons, of various gauges, had been shipped, as from the first of the year, bringing the total during the war up to 8,990 miles of track, 3,401 locomotives and tractors and 72,796 wagons.

The Scheme for Military Demobilisation had previously been prepared, and arrangements worked out to secure, on the cessation of hostilities, the release of men required to facilitate the process of demobilisation. The concurrence of the War Cabinet was obtained for the registration of 150,000 demobilisers and pivotal men and the nominal card index in respect of these men was in course of preparation at the date of the Armistice. By the end of the year 15,581 demobilisers and 10,633 pivotal men in industry had been registered. Eleven dispersal stations were established and personnel for the remainder of the dispersal stations throughout the Kingdom was earmarked. From 11th November, 1918, to 31st December, 1918, 1,648 officers and 114,235 other ranks were dispersed from the Army and 28,218 other ranks were discharged. From the Reserve (Classes W. and W. (2), P and P (2)) 144,351 were discharged, giving a total demobilised of 1,648 officers and 286,804 other ranks. The scheme for the free repatriation of men who came from overseas to serve in the Army was put into operation and a nucleus staff established at the Winchester Repatriation Record Office. Up to 10th December, 1918, the numbers of claims from dependants dealt with amounted to 500. Arrangements were made for the dispersal of Released Prisoners of War in this country. Three Reception Camps were set up at Ripon South, Dover and Canterbury, and by the end of the year 124,680 other ranks, prisoners of war, had arrived, and 108,390 had been dispersed, the average daily dispersed amounting to about 4,000. Throughout the year a special effort was made to maintain close touch with public opinion and authoritative information. The Weekly Press and Parliamentary Summary, containing extracts from Press articles and speeches in Parliament, specially relating to demobilisation and reconstruction was largely used by Education Officers in France with whom an intimate liaison was maintained through the Educational Branch of the General Staff. Steps were also taken to familiarise the men with arrangements made for their resettlement in civil life after the war. To this end wide circulation was given to the introductory chapter to the Demobilisation Regulations, which contained a review of the principles of the scheme of demobilisation and resettlement. Lectures on

information contained in this chapter were given by the consent of the War Cabinet to troops at home and abroad. Over thirty inter-departmental committees were engaged on different problems, all affecting and affected by military schemes of demobilisation. The War Office was represented on these Committees and provided secretaries for them, and in this way much executive work in connection with reconstruction and post bellum questions was carried out. Provision was made for the adjustment of the Demobilisation Scheme to meet the various new decisions made through the War Cabinet Demobilisation Committee.

The following figures are a testimony far more eloquent than any words can be of the mighty part played by the British Empire and of the effort and sacrifice of her sons between the two fateful dates, August 4th, 1914, and November 11th, 1918.

Strength of the Regular Army, Reserve and Territorial Forces on August 4th, 1914, was ...	733,514
England has since recruited ... ..	4,006,158
Wales and Monmouthshire ... ..	272,924
Scotland ... ..	557,618
Ireland (excluding those enlisted out of Ireland)	134,202
Canada ... ..	628,964
Australia ... ..	416,809
New Zealand ... ..	220,099
South Africa ... ..	136,070
Newfoundland ... ..	11,922
Other Colonies, &c. ... ..	12,000
<b>Total White enlistments ... ..</b>	<b>7,130,280</b>

The figures for races other than white were approximately as follows :—

India—

At the outbreak of war ... ..	239,561
Recruited up to the 30th September, 1918 ...	1,161,789
South Africa ... ..	92,837
West Indies ... ..	10,000
Other Colonies ... ..	20,000
<b>Total of other races ... ..</b>	<b>1,524,187</b>
<b>Grand total all races ... ..</b>	<b>8,654,467</b>

In addition to the above, Chinese and other labour units have been raised for service in Egypt, Mesopotamia and Salonika.

The following are the total casualties of the Armies of the British Empire up to the end of 1918 :—

—	Officers.	Other Ranks.	Total.
Total killed ... ..	38,264	628,569	666,833
„ wounded ... ..	92,142	1,948,378	2,040,520
„ missing and prisoners ...	11,958	342,610	354,568
Total ... ..	142,364	2,919,557	3,061,921

## CHAPTER VII.

**THE AIR SERVICE.****Organisation of the Air Ministry.**

The Report of the Air Services for the year 1917 recorded the circumstances which led to the decision taken by the Legislature to transfer the responsibility for the administration of the Air Service to a single and independent Department.

The period covered by the present Report is the period of the administrative realisation of the principles involved in that decision. The Air Council was set up on January 2nd, 1918, but most careful preparation was clearly needed before it could undertake to accept the transfer from the Admiralty and War Office of full responsibility for the direction of the Royal Naval Air Service and the Royal Flying Corps, or to complete the various intricate adjustments necessary to weld the two branches into a single Force. The complexity of the task was increased by the fact that the two branches of the Air Service were based on systems of administration so widely and necessarily different as those by which the Navy and Army are respectively controlled.

It was a primary and essential consideration that the amalgamation of the two Services should be brought about without dislocation or delay in the work of the Air Service in the field or at home. To secure this it was necessary that the unified Force should be administered on a system which would be, so far as possible, in accordance with the previous experience of those who would be responsible for its direction. It almost inevitably ensued that the initial organisation of the Royal Air Force should in its main features follow that of the Army, unfamiliar though that would be to the smaller portion of the new Force which had belonged to the Royal Naval Air Service, and whose members were consequently accustomed to naval and not to military systems of administration. To institute either an entirely novel system of administration, based, as it would be, on *a priori* conceptions of the requirements of the new Service, or to seek to devise some form of compromise between the deep-rooted differences of naval and military methods, would have been to invite difficulties which might have had the most serious consequences.

The preliminary distribution of duties among the departments of the various members of the Air Council accordingly followed *mutatis mutandis* that of the distribution of duties in the War Office. Broadly speaking, these may be stated as making the Chief of the Air Staff responsible for all questions of Air Policy affecting the security of the Empire; for advising the Government as to the conduct of air operations and the issue of orders in regard to them; and for the organisation, fighting efficiency and training policy of the Air Force. The Master-General of Personnel was responsible for the raising, training and administration of personnel (both officers and men) required

to carry out the approved policy. The Controller General of Equipment was charged with supervising the provision of all aircraft, engines and armament, and with the allotment, issue and repair of all aircraft, as well as with all transport, supply and equipment services.

The responsibility of the Controller General involved the closest liaison between him and the Director General of Aircraft Production, who, under the Minister of Munitions, had been since December, 1916, responsible for the production of aircraft in accordance with the requirements of the Service. The Director General of Aircraft Production also was given a seat upon the Air Council.

The financial responsibility for the administration of the Air Force was assigned to the Department of the Under-Secretary of State, and the view was taken that the very great extensions in works (including the provision of new aerodromes) and buildings which were involved in the expansion of the flying services required that this branch of the duties of the Department should be directly represented on the Council by the Administrator of Works and Buildings. The Department of the Secretary to the Air Council was charged with the co-ordination of the work of the various executive branches (including the preparation of statistics), with the legal business of the Department, and generally with services common to the Air Ministry as a whole.

The scheme of division of duties having been settled, a considerable amount of preparation was required before the transfer of administrative responsibility could be brought about, and though the Air Council had been constituted on January 2nd, 1918, it was not until the 18th of February that the Air Ministry was able to take charge of the administration and posting of Air Force personnel by arrangement with the War Office and Admiralty. The actual amalgamation of the Royal Naval Air Service and Royal Flying Corps in the Royal Air Force was effected as from the 1st of April. It was necessary in advance of the amalgamation to regulate relations between the Air Ministry and the War Office and Admiralty for the control of Air Force personnel operating with the Navy and Army, to draw up a system of pay and allowances and to adjust to it the systems prevailing in the Royal Naval Air Service and the Royal Flying Corps; to provide for the re-grading of personnel; to draw up King's Regulations, rules of procedure and other regulations comprising a code of discipline for the new Service; to provide by Order in Council for the application to the new force of various enactments respecting the Army and to make a very large number of other preliminary arrangements.

It should be added that the setting up of the Royal Air Force did not imply any immediate cessation of the performance by the Admiralty and War Office of various services connected with, for example, victualling, which continued for the time being to be carried out by these Departments as agency services for the Royal Air Force. In respect of these, acknowledgment is due

to the ready assistance rendered by both the senior Services, an assistance which in important spheres continued throughout the year.

### *Works and Buildings.*

The Administrator of Works and Buildings took over from the War Office as from 1st January, 1918, the whole responsibility for the construction of Inland Air Stations, and at the same time took over the staff of the Aviation Section of the Directorate of Fortifications and Works. He also supervised as from this date the work of construction of Marine Stations, but the actual transfer of Admiralty staff in charge of this construction did not take place until 1st April, 1918.

The programme of construction which the developments of aircraft in the war had made necessary was very large, and involved the construction of Repair Depôts, Acceptance Parks, Stores Depôts and Parks, Training Depôts and Schools, and Day and Night Flying Home Defence Stations.

The Inland Stations were in many cases located in remote country districts, and this involved the construction of new roads and branch line railways to a considerable extent.

An idea of the amount of work involved may be given by stating that the total area covered by the stations for which the Works and Buildings Department was responsible amounted in the case of Inland Stations to 50,000 acres or 78 square miles, and in the case of Marine Stations to 11,000 acres, while the actual area covered by buildings was in the case of Inland Stations 1,350 acres, and in the case of Marine Stations 70 acres. The supply of water and drainage and sanitation works was in itself a large undertaking, as may be seen from the fact that for Inland Stations alone the length of main drains laid was upwards of 350 miles, while the water mains were nearly 300 miles in length. The whole work of construction gave direct employment for the past year to nearly 70,000 workmen, and as most of the sites were in remote country districts provision had to be made of extensive temporary buildings for housing accommodation and canteens and for the supply of food to the workmen.

The heavy expenditure upon these works is due mainly to the extraordinary developments in aircraft which have led to a steady growth in the size of the aeroplanes used. In the early days a small hangar was sufficient to house three machines, but in the latter days of the war large and expensive sheds had become necessary.

### *Medical Services.*

It was in the first instance contemplated that the medical service for the Royal Air Force should be included among the list of agency services, and that the care of its personnel should

accordingly be provided by the Royal Army Medical Corps and the Royal Naval Medical Service as the case might be. Further experience, however, emphasized the special character of the medical and psychological problems which the care of pilots presented, and led to the conclusion that the establishment of a separate Air Force Medical Service was required. The organisation of this was put into shape.

#### *Royal Air Force School of Music.*

The absence of the machinery to provide music for so large a personnel and the unique need for it led to a somewhat novel scheme, worthy of note here since it is capable of permanent development.

Under a specially appointed Musical Directorate, a Royal Air Force School of Music was formed to which capable musicians already in the Force were sent for short intensive courses of instruction as to how to form, train, and conduct bands, orchestras and glee clubs, how to make programmes, how to adapt and score music for small bands, how to set an audience singing. It is hoped that the present school will become a permanent centre for the provision of music to the whole Force, not only as an aid to discipline, but as an organised recreation both for officers and men.

#### *Meteorology.*

Developments in the range of travel of aircraft rendered the study and application of meteorological science of steadily increasing importance to the Air Service: by arrangement with the Admiralty a portion of the meteorological services hitherto performed by that department was transferred to the Air Ministry, and wide development of Royal Air Force meteorological functions has taken place.

#### *Air Inventions Committee.*

In the War Cabinet Report for 1917 reference was made to the inception of the Air Inventions Committee. Its work was carried on in close association with the Advisory Committee for Aeronautics, the Accidents Investigation Committee, and other bodies, including the Society of British Aircraft Constructors. About 400 inventions were received monthly by the Committee, and though, as would be expected, the great majority of these were of no special value, in many cases results of importance were obtained. Mention may be made of a recent invention which was tried under active service conditions in France within one week of the date of its submission to the Committee, and which was ordered in large quantities within a fortnight from that date.



*Advisory Committee on Aeronautics.*

On the institution of the Air Ministry it was agreed that the Advisory Committee on Aeronautics, which had previously reported to the First Lord of the Treasury, should for the future report to the President of the Air Council. In the course of the year considerable additions were made to the equipment at the National Physical Laboratory where the experiments and tests on behalf of the Committee were mainly conducted : and a great amount of experimental research work was carried out at the request of the Committee; most of which, under war conditions, was necessarily of a confidential kind.

*Civil Aerial Transport.*

The remarkable developments both in the science of aviation and in the size and importance of the aircraft industry which have taken place under the pressure of war conditions created problems of great complexity, which with the prospect of approaching peace became of increasing urgency.

The Report of the Civil Aerial Transport Committee was presented to the Air Council in May, 1918, and, with certain excisions which were required on military grounds, was issued to the public in December. This Report, representing as it did close investigation by a thoroughly representative Committee, was of great assistance in defining many of the principal questions at issue and exploring the methods for their solution.

Active steps were taken in the Ministry before and after the conclusion of the Armistice to prepare for the resumption of civil flying. A Draft Convention to regulate international flying is at the time of the writing of this Report under negotiation in Paris. Enactments to regulate flying in this country, temporarily and permanently, on return to normal conditions were put into draft. Preliminary steps were also taken to demonstrate the possibilities of present day aircraft by organising various demonstration flights, long distance and other, and the first of these flights from Egypt to India was successfully performed.

**Work of the Royal Air Force in the Field.**

The year 1918 was one of phenomenal expansion, both in material and personnel, whilst concurrently there were notable developments in aerial strategy and tactics. As a consequence air power established itself as a dominant factor in modern warfare.

In 1914 the primary function of the aeroplane was reconnaissance. Since that time the record of military aeronautics has been one of continuous enlargement in the range of its activities. To the original function of reconnaissance were successively added artillery co-operation, photography, air fighting, bombing by

day and by night, and low flying attacks on troops and transport. Thanks to the initiative of our pilots and to progress in research and experiment and in organisation, these functions were adapted and enlarged to meet each successive development which the course of the war revealed.

During the retreat which took place in March large numbers of telephones and telegraphs were cut by the enemy, and great difficulty was experienced by the various staffs, arms and units in maintaining touch. This difficulty was partly overcome by the development of a system of communications by aircraft. Constant liaison was maintained from the air with cavalry, infantry, artillery and tanks; aircraft covered their advance with smoke screens, prepared the way and guided them to their several objectives, neutralising obstacles in their path by bombs and machine gun fire. Aircraft again were used to bring up supplies of munitions and rations which were dropped by parachute to our advanced troops. During the retreat again concentrations of our machines held sectors of the defensive line. When the tide of war changed and British arms were advancing to their final victory our aeroplanes compelled the surrender of large bodies of enemy infantry who were unable to withstand the terrors of low-flying attack.

The growing intensity of aerial warfare may be illustrated by a comparison of the results achieved during the opening days of two almost parallel offensives during 1917 and 1918. In the latter the number of enemy aircraft destroyed or driven down and the quantity of machine gun ammunition fired at ground targets increased by no less than 600 per cent., whilst 12 times as many tons of bombs were dropped, and photographic work and artillery co-operation showed a proportionate development.

It is now established that air superiority can turn a retreat into a rout. The completeness of the Turkish defeats in Palestine was due in no small measure to our local superiority in this respect. Our squadrons maintained continual watch over the enemy's aerodromes so that not a machine could leave the ground, and as a result the enemy was blinded at the climacteric of the battle and our cavalry's turning movement matured without detection. Once the enemy retreat set in, our aircraft gave their slow moving column of troops and transport no respite from bomb and machine gun attack, and wrought such havoc in the congested traffic that escape became impossible.

Unfortunately, less decisive results were possible during the great advance on the Western Front owing to the almost uniformly misty and foggy weather. On one day of good visibility the air was cleared of 96 enemy machines preparatory to an intended attack by the infantry which was, however, rendered impossible by a return of low lying clouds which, on the following day, again shrouded the front. The weather, however, was not allowed to prevent our squadrons from maintaining the policy of

steady and unrelenting attack both by day and by night upon enemy concentrations of troops and upon his billets and communications and ammunition dumps. There is much evidence to show that this continuous and harassing air offensive produced the greatest moral and material effect upon enemy personnel, keeping them in a perpetual state of apprehension, apart from the damage and casualties inflicted. Captured letters made frequent reference to this. In France, moreover, the Royal Air Force, besides co-operating with the British Armies in the Field, rendered most effective aid to our Allies during special operations. For example, a brigade of the Royal Air Force was lent to the French during the opening of their offensive in July, and its achievements were made the subject of a special eulogy by Marshal Foch. A number also of our squadrons supported the Belgian forces during the advance on the northern sector of the battle front, and took a large share in driving the enemy from the Belgian coast.

In other theatres of war also, Royal Air Force detachments showed a high degree of adaptability to the widely varying spheres of action in which they were called upon to operate.

In Russia, in spite of the intense cold, flying continued throughout the year. Valuable reconnaissances were carried out under most difficult weather conditions, and the serious engine troubles caused by the low temperature were successfully overcome, while the difficulties of landing on snow were solved by means of specially designed under-carriages.

In Italy, where a detachment had been sent in the autumn of 1917 as a result of the Austro-German offensive, distinguished service was rendered. An early supremacy was established and maintained over the enemy squadrons. More than 400 of his machines were shot down, and in addition, a number of kite balloons were destroyed.

A high standard of efficiency was also maintained by the Air Force detachments in the Balkans. The continuous enemy raiding in this district (which was at one time serious) was finally overcome by the personal prestige which our pilots and observers established over the enemy squadrons.

Tribute is also due to the unit operating in East Africa whose co-operation was recognised to be of the greatest assistance to the military forces. The difficulties of supply and transport, and the heights above sea-level at which flying had to be carried on, rendered the work of the squadron arduous to the last degree.

In Mesopotamia and Arabia, the strength of the Air Force units was increased considerably during the course of the year. Many flights over great areas of unmapped desert were undertaken under conditions in which even minor failure or accident to engine or aeroplane would probably have meant starvation and death.

Successful reconnaissances were made over caravan routes, villages, and oases, and the enemy troops were successfully located.

On the North West of India again, valuable services in policing the frontier tribes were performed by a small number of machines: and there, as in Arabia and Mesopotamia, abundant evidence is forthcoming of the impression of the power and ubiquity of British arms which was produced on the inhabitants by the swift and unlooked for appearance of His Majesty's Aircraft.

The activities of the Independent Force, Royal Air Force, of which Major-General Sir H. M. Trenchard, K.C.B., D.S.O., was placed in command on June 6th, produced the greatest moral and material effect in Germany. The Independent Force was created in order, as far as possible, to effect by means of a series of systematic and concentrated bomb attacks the progressive dislocation, in order of their relative importance, of the enemy's key munition industries, upon which his armies in the field and his submarines at sea were alike entirely dependent. To achieve this end a special type of machine was evolved of large dimensions, long air endurance, and capable of carrying a formidable load of explosives. Demands for the aerial protection of the civil population, for which there was an early outcry in particular by the inhabitants of the Rhine provinces, could only be met at the expense of the fighting front, and the increasing radius of our bombing operations resulted in the immobilisation of a growing number of hostile squadrons for purposes of home defence, thereby augmenting our air superiority in France and Belgium. Furthermore, the material damage inflicted in the course of our attacks on the railways and factories of Germany largely helped to sap the enemy's source of supply at the root. In this respect the situation was the more serious for the enemy in that his aircraft industry had already passed its zenith, whilst the shortage, both of men and material, was becoming acute. This was evidenced by the numerous substitutes found, on examination of captured aeroplanes, to have been employed in their manufacture.

Royal Air Force units co-operating with the Navy took an increasing share in the scheme of anti-submarine operations in home and foreign waters. Many thousands of miles were covered each week by airships, aeroplanes, seaplanes, flying boats and kite balloons, and a system of intensive patrols was instituted consisting of an inner chain of coastal reconnaissances conducted by aeroplanes and an outer chain of extended scope allotted to long range flying boats. This system did much to secure our sea communications and safeguard our shipping.

Raids on hostile coastal bases also contributed to the defeat of the enemy's submarine campaign, and, as has been proved by a subsequent inspection, entailed on the enemy a vast

expenditure of labour and material on protective measures. Continuous attacks on Zeebrugge, Ostend, Bruges and their inter-connecting system of canals rendered it impossible for the enemy adequately to repair the damage caused by the Navy's successful blocking operations at the two ports first mentioned. Cattaro and Durazzo in the Adriatic were also repeatedly bombed with excellent results, whilst from the Islands of the Ægean a series of raids which were productive of great moral and material effect were carried out on Turkey, in particular on Constantinople and the warships lying in its harbour. Another very successful operation which was undertaken in conjunction with vessels of the Grand Fleet was the attack on the airship sheds at Tondern in July, when it is probable that at least two Zeppelins were destroyed. The enemy also suffered heavy losses as a result of the engagement at sea by our land machines of airships raiding England or engaged on fleet reconnaissance duties, and in consequence there was a marked decrease in the number of patrols undertaken by his lighter-than-air craft over the North Sea, which largely curtailed his principal source of information with regard to the movements of our Naval forces.

As regards overseas patrols by the enemy's heavier-than-air craft, his retirement from the Belgian coast and consequent abandonment of valuable air bases greatly simplified the problem of countering his reconnaissance activities in this area, and rendered possible the transference of a number of squadrons hitherto assisting our sea forces to co-operate with our armies in the all important prosecution of the offensive on the Western Front.

Statistics for the period July, 1916 (the earliest date for which reliable records are at present available) up to the date of the armistice show that in all theatres of war, 7,908 enemy aircraft were brought or driven down out of control. The number of our machines missing during the same period was 2,810.

The weight of bombs dropped was nearly 8,000 tons.

More than 500,000 photographs were taken and nearly 12,000,000 rounds fired at ground targets.

Enemy air raids on the British Isles showed a marked falling off during 1918. In 1917 a total of 33 raids was carried out by all types of hostile aircraft; in 1918 only 10 raids took place, whilst there was no attack by hostile aeroplanes after the night of May 19/20th, when seven of the raiders were brought down over England or in the vicinity of the coast, and a further three are known to have crashed in Belgium, mainly as the result of the attacks of our night fighting scouts.

The organisation for aerial home defence underwent radical improvement. The co-operation of night fighting aircraft with a ground searchlight system reached a very high pitch of efficiency. The system was extended, and night fighting squadrons were placed in the back areas in France, where, in addition to pro-

testing the lines of communication of our armies, they formed the most efficient first line of home defence. Excellent results were achieved, and very numerous enemy night bombing aircraft were attacked and destroyed on both sides of the line at slight cost.

An interesting development in another direction was the institution of a "Communications" Squadron for speedy conveyance by air of Ministers of State and a restricted number of other passengers on Governmental missions, or of important despatches of an urgent character. The success which attended this service augurs well for the commercial future of aircraft, and emphasizes the fact that in peace their primary function will be to provide an improved means of communication of almost unlimited potentialities.

Such, in brief, were the more salient activities of the Royal Air Force in the year under review. They were only rendered possible by a largely augmented output of machines and pilots, and by improvements in organisation and technical and training methods to cope with the progressive specialisation of the different branches of air operations.

At home the chief development from the standpoint of organisation was the accomplishment of that decentralisation of control which is essential for the efficient administration of a growing and scattered service. This was secured by the division of the British Isles into five Air Force areas, each in charge of a Major-General with an adequate staff, upon whom devolved many of the functions hitherto performed by a single central headquarters.

Under each area a varying number of groups—operational, training or equipment were placed; the group in turn being sub-divided into wings and squadrons.

Overseas, little organic alteration was necessary in so far as units co-operating with our armies in the field were concerned, but the existing system was adapted to cope with expansion. In the case of units co-operating with the Navy, on the other hand, considerable modifications were introduced, and in particular a Mediterranean district command was instituted, which was sub-divided into groups appropriate to the Navy sub-commands already in being.

From a technical standpoint the year 1918 saw a great advance in engine and aeroplane design, and machines of all classes were constructed to give a very much higher performance than heretofore, in accordance with the exacting requirements of present day flying.

Of new types, mention has already been made of the large long distance night bombing aeroplane; another interesting

innovation was an armoured single seater scout of great speed and manœuvrability for low flying attack on suitable ground targets.

Accumulated experience resulted in the introduction of numerous improvements in our training system, in particular the "all through" method of instruction by which a single instructor was made responsible for as many stages as possible of a pupil's flying training. Further, our training establishments and specialised schools, for example, schools of navigation and bomb dropping, were very considerably expanded and increased in number to cope with the constant demand for a larger output of pilots.

## CHAPTER VIII.

**MUNITIONS.**

The Ministry of Munitions is the oldest, as it is also the largest, of the temporary Departments created to meet the needs of the war. The present Prime Minister was formally appointed Minister of Munitions of War on June 9th, 1915. Three years and five months later the Armistice was signed and the main task of the Department accomplished. To that Victory the Ministry had made a very substantial contribution.

The difficulties with which the Ministry was confronted have been many and various: each of them being an aspect of the special strain to which this country, in common with the other European belligerents, was subjected during the last year of the war. The most serious single limiting factor on the output of munitions was the shortage of shipping. The actual supply of shell for the year 1918, though it marked the highest pinnacle of actual output attained during the war, was, in fact, substantially less than the maximum programme for which productive capacity had been provided. For the limitation of material affected the output of munitions at every turn, and the most rigid economy became necessary when it was realised that every ton of material imported to meet the demands of one Department meant the subtraction of a like amount from the supply available for some other public service.

Another shortage affecting the output of munitions in 1918 was that of coal, due to many causes, but chiefly to the loss of the coalfields of Northern France after the battle of Armentières, and to the simultaneous depletion of the British collieries to meet the increased need for men in the Army. The recruitment from the coalfields had actually a more serious effect than the recruitment of munition workers, since the latter were more easily replaced by methods of dilution.

In the face of these and many other grave obstacles the record of the Ministry of Munitions is one of proud achievement, and in an attempt to appraise the elements of that success the foremost place must be given to the enthusiastic and unremitting toil of the great civilian army of men and women munition workers. The loyalty with which their task was discharged does not always receive the full measure of credit which it deserves, because strikes, when they have occurred, have assumed a disproportionate prominence in the Press and in the public mind. The vast majority of munition workers have laboured on without complaint, attracting little attention, and the amount of work lost by strikes during the last fifteen months of the war was in the proportion of only one-fifth of one per cent. of the amount of the work actually accomplished.

**Administrative Organisation.**

*The Inter-Allied Munitions Council.*—In the sphere of administration the outstanding feature of the period under review was the great advance made in respect to effective co-ordination of



Inter-Allied effort. In the field of munitions supply this development ranks with the achievement of unity of command in the sphere of strategy to which it is in fact the inevitable corollary.

Previous to the establishment of the Inter-Allied Council there was no sure method of securing that the Ally most in need of a particular supply was in fact obtaining that supply in preference to the need, real but definitely less urgent, of another Ally. Also it was found that the Allied Governments were not kept sufficiently informed of the progress they were severally making in the invention and improvement of weapons of war.

The United States Government had suggested, shortly after its entrance into the war, that as soon as the appropriate machinery could be devised it would be necessary that purchases for the purposes of the war by the several Allies should only be made after submission to a body representing them all, which would settle priority and cut down demands to what was reasonable and necessary. But the Allied Maritime Transport Council had found that in its business of allocating the available shipping tonnage of the world to the most urgent needs it was impeded by the absence of any authoritative body representing the needs of the Allies for munitions and materials. The three main classes of commodities requiring shipping tonnage were (a) food and feeding stuffs, (b) coal, and (c) munitions and their raw materials. In the matter of food, the Maritime Transport Council was able to deal with well-organised bodies representing the whole Alliance; they were also able to obtain a comprehensive statement of the requirements of coal; but with regard to munitions they found themselves dealing with the separate Governments of the Allies, without any means of deciding the relative urgency of the demands made by those Governments for different parts of their programmes.

Under the stimulus of these several needs, the Inter-Allied Munitions Council took shape and held its first meeting in June, 1918, in Paris. Among matters considered by the Council was the assistance in munitions required from the European Allies to complete the equipment of the very large forces which the United States were then sending to Europe, in response to the appeal of the Allies. A complete tonnage programme for munitions and materials for 1919 was also prepared.

*The Munitions Council.*—When Mr. Churchill became Minister of Munitions in July, 1917, the Ministry had already assumed somewhat unwieldy proportions, spreading as it did into more than three dozen buildings, including several large hotels. Corresponding with its dispersed accommodation was a certain lack of centralised organisation, due to the emergency nature of its origin, the rapidity of its growth, and the fact that rapid and energetic initiative was the quality chiefly demanded of the great business men from whom its Heads of Departments were mainly recruited. Under Mr. Churchill the fifty or sixty Departments were re-organised into "Groups" under a Munitions Council, each group being presided over by a Member of Council, respon-

sible for the superintendence and co-ordination of its departmental activities. At the time of the conclusion of hostilities these groups were ten in number, and the list of their names provides the briefest possible summary of the work of the Ministry.

- (i) Secretariat, including Departments of Priority, Requirements, Statistics, Demobilisation and Reconstruction, etc.
- (ii) Finance, including Contracts, Factory Audit and Costs, etc.
- (iii) Design, including Inspection.
- (iv) Steel and Iron.
- (v) Material: Non-ferrous material, railway materials, optical munitions and potash, etc.
- (vi) Explosives, including Oils and Chemical Warfare.
- (vii) Ordnance.
- (viii) Warfare: Mechanical warfare, trench warfare, mechanical transport, etc.
- (ix) Aircraft.
- (x) Labour.

### **Financial Administration.**

During the year 1918 financial records improved in accuracy, and in consequence economic control became more efficient. The total net expenditure by the Ministry of Munitions was—1915-16 (9 months), £223,000,000; 1916-17, £503,000,000; 1917-18, £640,000,000. The gross turnover, taking into consideration sales of materials and components, has been probably three times these figures. The working capital of the Ministry is approximately five hundred million pounds.

A very considerable improvement was effected in the method of accounting, and a double-entry system of book-keeping on sound commercial lines has been established. The scale of the financial machinery involved is indicated by the fact that the number of contractors' bills dealt with in the year was over a million, or, roughly, twenty thousand a week.

*National Factories.*—Excluding the Royal Ordnance Factories at Woolwich, Enfield and Waltham, there were at the 31st March, 1918, 244 national factories, mines and quarries, etc (since increased to 302) which were managed by the Ministry of Munitions or by direct agents on its behalf. The accounts at the 31st March, 1918, showed that the assets amounted to over £108,000,000, works, plant and other capital expenditure representing over £52,000,000, and stocks of raw material, finished components, cash, etc., about £56,000,000. The turnover of the new factories, etc., for the year ending 31st March, 1918, was

£395,161,947. The Cost of Production Statement for the Royal Ordnance Factories and for the newer national factories respectively included the following items :—

	<i>New Factories.</i> £	<i>Ordnance Factories.</i> £
Stores, material and components ... ..	332,044,053	25,177,316
Labour ... ..	20,280,675	15,001,299
Repairs and maintenance...	5,486,532	1,092,115
Power, light and heat ...	3,171,396	338,917
Depreciation ... ..	8,393,766	578,796

*Cost Accounting.*—Monthly Cost Returns are obtained from these national establishments and used by the administrative departments for control purposes. Generally, the costs of production compare favourably with the prices paid to outside contractors. Production in the Royal Ordnance Factories was equal to three-quarters of the total in all other national factories, but a different system of accounting is in operation, and the costs are not so readily available. It has been found inadvisable to institute detailed alterations in the system during war-time.

The installation of costing systems into the national factories was fraught with many practical difficulties. In the autumn of 1915 and spring of 1916, when the early factories first started operations, output was of far more importance than accounting; production could not be jeopardised to secure adequate store check; shells, not costs, were required by the Army. Work commenced at some of the factories before any office accommodation was provided; the accounting staff had little or no knowledge of costing, or in some cases of book-keeping. Yet, at some of the factories, despite these difficulties, production costs were obtained practically from the outset, and information thereby afforded to the contract officers which resulted in large savings in contract prices. Later, the whole of the costing at national factories was brought under one central control, and a Cost of Production (National Factories) Committee set up, with the result that the Administrative Departments evinced a much keener interest in the cost results and in the allocation of work to factories which produced economically.

Whether the labour involved and the expense incurred in the introduction of efficient costing systems at the national factories can be justified depends—

- (a) On the use made of such costs in the direction and control of the undertakings by the departments responsible for the administration.
- (b) On the saving effected in contract prices as the result of the information obtained.

The Costs section of the Department of Factory, Audit and Costs directed attention to cases of high costs, waste, etc., and these questions were taken up by the Administrative Departments with

the factories, often with good results. For example, the cost returns from one factory showed that the cost of a certain component was high compared with another factory. Further inquiry elicited the fact that the production per worker at No. 1 factory was 46·90 per shift of 8½ hours, compared with 103·5 per shift of 9½ hours at No. 2 factory. A detailed examination followed, with the result that in two weeks the production per worker at No. 1 factory increased to 81 per shift.

The saving made in the prices of shells through the availability of national factory costs was demonstrated by Sir Hardman Lever and Sir John Mann in evidence before the Public Accounts Committee, but the following additional examples may be cited as illustrations of the uses to which national factory costs are put for regulating contractors' prices :—

Certain contractors quoted prices which on deliveries under the contract would have amounted to £284,535. The contract was eventually made at £107,891, on the basis of the costs at a national factory doing the same work, after allowing for higher wages rates paid by the contractors—a saving of £176,644.

Certain contractors quoted prices which on delivery under the contract would have amounted to £34,717. National factory costs were taken as the basis and the contract price fixed at £16,537, a saving of £18,180.

In some cases contractors have been invited to visit the factories and verify for themselves the accuracy of the cost statements presented to them and the reason for the lower costs disclosed, with the result that they have been able to introduce economies and reduce their own costs of production.

It may then be reasonably claimed that the introduction of costing systems at the national factories was justified by the results. The Public Accounts Committee in their report stated : “ The factory cost accounts appear to have served their double purpose of a check on the efficiency of the factory and of comparison with contractors' prices.”

*Storage and Salvage.*—A complete reorganisation of the Stores system of the Ministry was carried out during 1917-18, and a Central Stores Department instituted responsible for the custody and accounting for all Ministry goods, except explosives. Before this year there had been considerable division of responsibility for storage of goods of different types, and the establishment of the Central Department has resulted in greater efficiency and more satisfactory accounting. Despite the difficulties of stocktaking during a period of war pressure, complete stocktaking has been carried out at Ministry Depots, disclosing the following position of actual stock as compared with accounts balances :—

Surpluses	...	...	...	£1,931,000
Deficiencies	...	...	...	1,785,000
				<hr/>
Net surplus	...	...	...	£146,000
				<hr/>

a result which is highly satisfactory, having in view (a) the enormous difficulties of maintaining accurate stores records in time of war; (b) the fact that the net discrepancy is only .015 per cent. on an estimated value of £1,000,000,000 for goods handled.

Another source of economy during 1918 was the establishment of a system for the disposal of obsolete munitions and machinery and scrap materials. The value of the sales effected from the time when this department was formed in May, 1918, down to the conclusion of hostilities, was about £500,000.

### **Supply of Metals and Materials.**

*Iron and Steel.*—From the point of view of munitions output, the supply of steel is only less important than that of shipping tonnage, upon which, of course, it is closely dependent in consequence of the high proportion of sea-borne supplies of raw material. The available supply of steel was, during 1918, the principal determining factor in the scale of the Gun Ammunition Programme, and the supply of steel products generally had an important influence in nearly every branch of munitions output. In the early months of 1918 there seemed to be good prospects of a large increase in the home production of iron and steel. In March the output of steel ingots and castings for one week reached the record figure of 215,000 tons, representing a rate of production of over 11 million tons per annum, as compared with 9½ millions for 1917, and a further increase to 12 millions was confidently expected. Military events, however, changed the whole outlook and, as a result of the drastic recruitment of industrial labour, the aim of the Ministry became rather to maintain the 1917 level of output. This was more than accomplished.

The general results achieved may be summarised by saying that during the first half of 1918 the average weekly output of pig iron was 181,000 tons, and of steel, 192,000 tons per week, as compared with 200,000 tons pig iron and 147,000 tons steel in 1913. The output during the latter half of the year was somewhat less in consequence of the influenza epidemic and the interruption caused by the Armistice.

The following further particulars may be given with regard to the supply of these fundamental materials. The output of phosphoric ores from home sources for the year was increased by 750,000 tons. The output of hematite ores was disappointing, the increase being only about 50,000 tons. Imports of foreign ores were slightly in excess of those of 1917. The output of hematite pig iron showed a decrease of 255,000 tons per annum. On the other hand, the output of basic pig iron increased by 380,000 tons. The output of steel ingots was approximately at the rate of 10 million tons per annum, or rather more than 250,000 tons in excess of 1917. It is to be noted that taking the second quarter of 1918, 49 per cent. of the total steel production consisted of basic steel, as compared with 39·7 per cent. in 1916.

As regards the production of special steels, it may be noted that the output of high-speed steel rose to 18,000 tons, representing a further increase of 3,000 tons per annum. The demands for alloy steel for the production of aircraft, tanks, and motor transport largely increased during the year, and the exacting nature of the specifications presented serious difficulties from the standpoint of supply. These could hardly have been overcome but for the patriotic readiness with which a small number of firms with special facilities and equipment for the work, put, through the Sheffield Alloy Steel Committee, their special knowledge at the disposal of other firms, to enable them to participate in the manufacture of this class of steel.

The supply of raw material for steel was supplemented by the work of the Ferrous Scrap Branch, which located a quarter of a million tons of dormant ferrous material, and moved the greater part of it to scrap yards for sorting and breaking. The labour supply for this trade was increased by training discharged soldiers as oxy-acetylene cutters of scrap, and in one or two instances by the use of German prisoners. The detinning industry was developed, and 1,050 tons of steel scrap and 14.5 tons of tin recovered per week from detinning old tins and clean tin scrap.

*Non-Ferrous Metals.*—During the year under review satisfactory supplies of non-ferrous metals were secured by the Ministry of Munitions, and at the time of the Armistice the country was in a strong position in regard to these materials. Adequate supplies of lead were maintained by rigid economies and by the systematic control of old metal. The collection of scrap amounted to 4,000 tons per month. All requirements in aluminium were met. The manufacture of synthetic cryolite—for the production of aluminium—was taken in hand and it is anticipated that in 1919 the country will become self-supporting. The collection of scrap exceeded 500 tons per month. Arrangements made by the U.S.A. Government were most beneficial in keeping prices of copper and brass within reasonable bounds. The collection of copper from scrap amounted to 13,000 tons per month. Shortage of shipping was the cause of some reduction in the output of spelter. Monthly collection from scrap amounted to 5,000 tons. With a view to establishing this important trade on a firm basis in the United Kingdom, a contract was entered into during the year for the purchase from the Australian producers of their exportable surplus of zinc concentrates over a period of about ten years. It is anticipated that this step will lead to a strong and permanent spelter industry being established in the country, and will render important manufacturing trades, such as galvanised iron and brass independent to a great extent of foreign supplies. Tin remained uncontrolled until April, 1918, from which date its use was restricted to war purposes only. In September an Inter-Allied Tin Executive was formed with a view to effecting equitable distribution and avoiding unnecessary competition.

A satisfactory supply was also maintained in the case of antimony, nickel, platinum, calcium carbide, tungsten, graphite.

molybdenum, rosin, shellac, mica, pitch coke, bismuth, carborundum and corundum, emery stone, balata belting and French chalk.

*Explosives Materials.*—During 1918 a beginning was made in providing from home sources the two chief raw materials required for explosives, namely, nitrate of soda and pyrites, for which we were formerly wholly dependent on Chile and Spain respectively. Work on a nitrogen fixation and ammonia oxidation plant has been started, and a pyrites mine has been worked on a small scale in Wales. Arrangements were also made for the purchase of large quantities of pyrites in Norway, thus interfering with a German source of supply.

Adequate supplies of sulphuric acid were maintained, not only for explosives and essential trade purposes, but also for the making of fertilisers, responsibility for the provision of which had been undertaken by the Ministry on behalf of the Food Production Department.

*Mineral oil.*—Before the war practically all the fuel oils in use were imported natural petroleum products. With the great and sudden expansion of the use of oil for naval purposes, and of petrol for motor transport and aviation, coupled with the restriction of shipping facilities, it became necessary to take drastic measures. First, the use of petroleum for non-essential purposes was put under control, and 80 million gallons diverted from civilians to war requirements in the first year of licensing. Next it became necessary to develop such fuel oil supplies as could be provided from home sources, the only pre-war source of home supply being the Scottish Shale Oil Industry.

As a result of experiments in the carbonisation of native minerals in existing plants and by already organised staffs in gas-works, and by the use of creosote produced from coal tar as a substitute for imported petroleum, the supply from home sources has been increased sevenfold, and the supply of fuel oil for other than naval and military purposes is now assured from home sources alone.

*Railway materials.*—During the year this Department undertook the supply of portable ropeways, and 98 miles were manufactured, which was 59 per cent. of the mileage ordered. Another new form of supply was the manufacture of "pillboxes" or "casemates." Another urgent demand which arose during the year was for 40 ton "bogies" type platform wagons for the transfer of fighting tanks from one portion of the front to another. Large numbers of these were delivered, and the manufacturing resources of this country were liberally drawn upon by the Americans, on whose behalf 240 were ordered and delivered.

To facilitate the storage and handling and distribution of the enormous quantities of petrol required on the Western Front, large numbers of tank wagons were requisitioned from this country, and altered to conform with Continental railway practice.

With a view to rendering further assistance to our Allies, several trains of tank wagons were called for to ease the fuel position in Italy and France, as well as to distribute petrol amongst the large new aviation centres in France.

Generally speaking, the sources of supply of rolling stock have been reduced owing to the demands made upon manufacturers for other munitions, such as fighting tanks, gun limbers, aeroplanes and agricultural machinery. The demands for railway stock have consequently been limited to the estimated productive capacity, and, particularly in the case of wagons, this has been insufficient, and 10,000 wagons have been withdrawn from the British railway companies more especially to meet Italian coal requirements.

*Mechanical Transport.*—The output of mechanical transport, including motor lorries, ambulances, cars, tractors, etc., showed a substantial increase on that of 1917, and enabled a considerable number of vehicles and parts to be allocated to Allies, and this in spite of the fact that several of the factories used for this purpose in 1917 were handed over to provide facilities for the still more rapid expansion of Aircraft and Tanks.

### **Supply of Munitions and Equipment.**

*Guns and Ammunition.*—The production of artillery equipments in 1918 was on a scale which enabled the losses, due to the German offensive in March, to be quickly made good, and by June the position was such that, after making allowance for the wearing out of guns, due to the large expenditure of ammunition and casualties from shell fire, etc., it was possible to contemplate a reduction in programme for most of the important natures and to concentrate on securing guns with a higher velocity and a longer range. The necessity for equipping the American Army, however, prevented the reductions actually taking effect.

The establishments for anti-aircraft work were very considerably increased. The Nottingham National Ordnance Factory was organised on a scale to turn out 125 new and repaired 6-in. guns per month, compared with some 10 per month in 1917. By the date of the Armistice an output of about 50 guns per month had been attained. The output of repaired guns was very much in excess of the output in 1917.

In addition to the progress made in supplying high-velocity guns, considerable attention was paid to increasing the range of the artillery by alteration in the design of the shell, first by increasing the radius at which the head was struck and secondly by adopting what was known as the "stream line" shell. The detonating system in the shell was also greatly improved, with the consequence that blinds and prematures were much less frequent. Many economies were also effected, both in the manufacture and filling of gun ammunition generally; yet the quality was more than maintained. Another noticeable feature was the



great increase in gas and other special shells. The increase in the weekly output of chlorine (the basis of poison gas) between July and October was about 60 per cent., and the weekly output of H.S. (mustard) gas for October was ten times that for July. Production of phosphorus for smoke shell increased by about 70 per cent. between July and October.

*Anti-Gas Equipment.*—Improvements in containers and other anti-gas appliances were constantly being made and the highest efficiency was obtained. All demands for anti-gas equipment were promptly met, notably some sudden big demands for equipping the American and Italian Forces with anti-gas implements.

*High Explosives.*—All requirements for high explosives were met and so large a reserve created that it was possible to close down some of the less efficient and more dangerous factories and reduce the output in others. The result of this was that by August, 1918, the monthly output was less than half that for December, 1917. The arrangement that we should provide a certain proportion of ammunition for the U.S. Army, however, subsequently necessitated an expansion in output. Steps to this end were taken and response was immediate. In two months the monthly output had increased by 50 per cent. and was still increasing rapidly at the time of the signing of the Armistice terms.

*Propellants.*—As in the case of high explosives, reserve stocks of propellant had been built up to a point at which reduction in output was allowable, and by July, 1918, the monthly production was less than half that for December, 1917.

Here, again, the entry of America created the necessity for increased production to enable the combined shell-filling programme to be met, and the total receipts for October were double those for July, the home output for October being 30 per cent. more than that for July.

*Tanks.*—The production of tanks has been very variable, largely on account of changes in design, as the development of this arm has made rapid strides.

Production first commenced in June, 1916, and reached a maximum of about 60 per month. In April, 1917, the Mark IV Tank was produced and production in August amounted to 180 per month, thereafter falling, pending the development of the medium Mark A (a whippet tank) and the Mark V, a rather larger tank than the Mark IV, with a better transmission system. During 1917 the use of tanks as gun carriers and as tank tenders was also developed.

In April, 1918, production of all types reached 228 per month, but dropped again to 86 per month in August, rising to 172 per month in October.

Production during 1919 was expected to reach about 450 per month, the tanks being higher-powered and faster, but not much larger than previous designs.

Although the supply of armament had caused considerable anxiety, this had never seriously affected the production, the limiting factor of which was plant capacity and labour available to carry out the work.

*Aircraft.*—During 1917 the total output of aeroplanes was 137 per cent. in excess of that obtained in 1916, and in 1918 there was a further increase of 136 per cent. over 1917; that is to say, output for 1918 was about five and a half times that of 1916. Of seaplanes the total output in 1917 was 214 per cent. in excess of 1916; in 1918 there was a further increase of 69 per cent. Considerable progress was made, as regards both aeroplanes and seaplanes, in the reduction of the number of types and in the provision of multiple-engined machines.

Engine output increased 150 per cent. in 1917 and 114 per cent. in 1918 as regards number of engines. The average horsepower per engine increased 13 per cent. in 1917 and 30 per cent. in 1918. All these rates of increase could have been well maintained, had it been necessary, in 1919, when the average horsepower was expected to be approximately double of what it had been when the Ministry took over the supply early in 1917.

*Aerial Bombs.*—Early in the year a big programme of aerial bombs, ranging in weight from 20 lb. to 1,600 lb., was arranged, which was successfully carried through.

*Optical Munitions and Glassware.*—In spite of the fact that these trades were severely taxed by the recruitment of skilled men for the Services, the output was doubled as compared with 1917. Home production of optical glass has in all increased to something like ninety times the pre-war output, while the production of optical instruments from British sources has expanded to the extent of at least twelve times the pre-war standard. Prior to the war practically the whole of the scientific and chemical glassware used in this country was imported, mainly from enemy countries. It is now possible to meet all our requirements from home sources and, in addition, to afford assistance to our Allies.

*Overseas Munitions Supplies.*—During the course of the war the mobilisation of industry and commerce for military purposes has increased in amplitude as well as intensity, and has progressively extended its geographical range. Not only have the workshops of Britain been brought under comprehensive and systematic control, but all channels of commercial intercourse have been regulated and every quarter of the globe has been laid under tribute for the purpose of satisfying the all-embracing needs of munitions output. A picture might be drawn of the movement of materials from every region and climate under the sun, beginning with rills and rivulets in remote corners of the earth, and growing in volume as the converging streams unite in a mighty river of supply, finally directed in an irresistible torrent against the resistance of the enemy's defences. Nitrates from Chile; iron ore and pyrites from Spain; steel irons from

Sweden ; platinum from Russia ; quicksilver from Spain ; copper and aluminium from America ; abrasives from Greece ; cryolite from Greenland—these and many more industrial constituents have been gathered together to feed the furnaces and supply the factories of this country. No less varied are the contributions which come from within the confines of the Empire itself. From India have been drawn manganese ore, wolfram, magnesite and mica ; graphite from Ceylon ; from Canada steel, ferro-silicon and other ferro-alloys, nickel and asbestos, in addition to valuable contribution of spruce timbers for aeroplane construction and a great variety of other mineral products ; from Australia zinc concentrates, lead and antimony ; scheelite from New Zealand ; chromium and other special minerals from South Africa ; tin from the Straits Settlements.

*Canada.*—Special mention must be made of the important munitions supplies drawn from Canada. Before the Armistice was signed the number of munitions contractors in that country was approximately 1,000, employing between 200,000 and 300,000 workers, and the number of empty shells produced reached a total of nearly 69,000,000. This production was equal to one quarter of the aggregate output from all sources, and included more than half the 6-inch howitzer shell used by the British Army in 1918. In addition to this, Canada's contribution included large quantities of cordite, nitro-cellulose, acetone and T.N.T., as well as aero engines and railway materials.

Measured in terms of money, Canada's munition contribution has exceeded 1,000,000,000 dollars, that being the total expenditure of the Imperial Munitions Board to the end of 1918.

*India.*—The output of material and munitions from India has steadily increased. In addition to guns and gun ammunition, cordite, guncotton, machine guns, rifles and grenades have been produced, as well as steel, brass and leather goods.

A scheme for the development of the Indian Ordnance Factory on permanent lines had made considerable progress at the date of the Armistice.

*Summary of Output.*—The following particulars will serve to summarise in compressed statistical form the volume of production for which the Ministry of Munitions has been responsible :—

SUMMARY OF MUNITIONS OUTPUT, EXPENDITURE, LABOUR  
EMPLOYED, AND MATERIALS SUPPLIED, 1915-1918.

3rd Quarter. 3rd Quarter.  
1915. 1918.

*Munitions Output.*

British Output of New Guns—

Light	...	...	...	...	898	1,898
Medium	...	...	...	...	193	451
Heavy	...	...	...	...	—	561
Very Heavy	...	...	...	...	16	137

					3rd Quarter. 1915.	3rd Quarter. 1918.
Empty Shell Manufacture : Home						
Output—						
18-pdr.	...	...	...	...	1,703,000	8,300,000
4·5-in. Howitzer	...	...	...	...	205,000	2,280,000
60-pdr.	...	...	...	...	112,000	1,320,000
6-in.	...	...	...	...	28,000	2,820,000
Heavy	...	...	...	...	35,000	560,000
Completed Ammunition (tons)	...	...	...	...	34,200	580,000
Weekly Expenditure in France (tons)	...	...	...	...	2,300	48,600
High Explosives and Propellants :						
Home Output—						
High Explosives	...	...	...	...	10,470*	43,691
Propellant Powders	...	...	...	...	3,309*	15,816
Machine Guns	...	...	...	...	1,719	33,507
Rifles	...	...	...	...	176,239	287,755
Small Arms Ammunition	...	...	...	...	368,500,000	746,000,000
Aeroplanes—						
Planes	...	...	...	...	707	8,503
Engines	...	...	...	...	458	7,628

*Expenditure.*

Munitions Expenditure—						
United Kingdom	...	...	...	...	£41,440,000†*	£90,046,000
Canada	...	...	...	...	7,140,000	10,668,000
U.S.A.	...	...	...	...	25,957,000	18,057,000
France, Norway, Switzerland, &c.	...	...	...	...	†	2,806,000
Total	...	...	...	...	£74,537,000	£121,577,000

*Employment on Government Work.*

Government Work (excluding Admiralty) in Metal, Chemical and Rubber Trades—						
Men	...	...	...	...	877,000	1,319,000
Women	...	...	...	...	126,000	730,000
					1,003,000	2,049,000
Government Work (including Admiralty)—						
Men	...	...	...	...	1,414,000	2,098,000
Women	...	...	...	...	138,000	848,000
					1,552,000	2,946,000

\* 4th Quarter of 1915.

† For the earlier period the expenditure in the United Kingdom includes small amounts spent in France and Switzerland.

					3rd Quarter. 1915.	3rd Quarter. 1918.
Employment in National Factories only—						
Men	...	...	...	...	32,700	137,300
Women	...	...	...	...	250	168,500
Total	...	...	...	...	32,950	305,800

*Materials Supplied.*

Iron Ore—					Year 1915.	Year 1918.
Imported	...	...	...	...	6,197,000	6,566,000
Home Output :						
Hematite	...	...	...	...	1,656,000	1,550,000
Other	...	...	...	...	12,559,000	13,511,000
Pig Iron—						
Hematite	...	...	...	...	3,564,000	3,557,000
Basic	...	...	...	...	2,273,000	2,985,000
Other	...	...	...	...	2,957,000	2,541,000
Total	...	...	...	...	8,794,000	9,083,000
Steel Ingots—						
Acid	...	...	...	...	4,912,000	4,642,000
Basic	...	...	...	...	3,439,000	4,616,000
Imports of Munitions and Munitions						
Materials (tons)	...	...	...	...	2,880,000	3,456,000

The above is a very fragmentary and incomplete survey of the supply achievements of the Ministry. The facts given are no more than typical examples, sufficient to show the general characteristics of the supply results of the year—a supply, to quote Mr. Churchill's words, "adequate, abundant, and finally overwhelming." It was the possession of overwhelming supplies that first saved and then won the campaign of 1918.

In the last days of March, the Ministry was in a position to supply at once from its existing reserves everything in the way of munitions and equipment that had been lost in the retreat. The drain on our resources was merely shifted from the stocks in the field to the stocks waiting in England, and the Ministry could thus afford to release more men for the army at the very moment when it was making good the heaviest loss in munitions that our armies have ever sustained.

At the end of the campaign, supplies were more abundant than ever, and the highest ammunition expenditure ever reached during the campaign was that for the last week of September. Speaking at Glasgow on October 18, 1918, Mr. Churchill said :—

"We have fired in recent weeks a heavier tonnage of shells per day than in any previous period of the whole struggle. For nearly fifteen days in succession we have

hurled more than 10,000 tons of shells per day upon the enemy. I was shown the other day an order of General Ludendorff, captured by our armies, to his artillery commander, in which he says, 'in a single month the enemy have by their fire destroyed more than 13 per cent. of the whole of our artillery.' "

This means that the discharge of shell during a fortnight of the final advance was about twice as great as during any fortnight in 1917 and about three times as great as during any fortnight in 1916. Had it been necessary there is every reason to think that 1919 might have furnished an increase in the same proportion. Happily it was not necessary.

### **Munitions Labour Supply.**

The question of the output of munitions in 1918 can only be judged when account is also taken of the supply of labour, and brief reference must be made to this matter.

The dominant factor in the problems of labour supply with which the Ministry has been concerned during the latter months of 1917 and during 1918 was that of the need of the Army for reinforcements. It was necessary to draw heavily upon the man power engaged on munitions. In eight months of 1917, from May to December, nearly 68,000 men fit for general service were released for calling up, and the programme for 1918 involved the release to the Army of 104,000 more. If they were to be procured it was necessary to reconsider the system of granting protection certificates to men engaged on munitions, and to bring new classes of workers within the boundaries laid down for release. This was done; speaking broadly, the Revised Schedule of Protected Occupations, coming into force on the 1st February, made available for recruitment all men fit for general service who had not attained the age of 23 at the beginning of 1917, while in certain occupations a still later age was fixed below which recruitment might go on. The pace of release was quickened. In the first three months of 1918, more than 32,000 men were released for calling up—more than 10,000 a month.

Then came the great German offensive in March, and it was a question not merely of obtaining men, but of obtaining them at the earliest possible moment. It was judged necessary to release 20,000 men from munition work in the three weeks ending the 13th April. These men were found, and more; in the three weeks nearly 24,000 men were freed for general service, and in the following fortnight 16,000 more were released—over 40,000 men in five weeks.

The work of release was pressed on with the greatest possible speed. The War Cabinet decided that a "clean cut" should be

made of fit men under the age of 23, except those in shipbuilding yards or shale oil mines and works or occupying pivotal positions. Men born in 1898 or 1899 were to be released by the 17th May, and in their case it was decided later to release them all, regardless of the effect on output. Those born in 1895, 1896 and 1897 were to be released by the 17th June unless they occupied pivotal positions, when exemption might be continued.

Meanwhile, arrangements had been made for the return to the colours of trained soldiers, fit for general service, who had been returned from the Army for munition work. Between the middle of March and the beginning of July, over 4,000 of these men went back to the colours. By the end of June, the Ministry of Munitions could claim that, in 6 months' time, it had released for calling up for the Army over 104,000 Grade I. men. In addition some 10,000 men of lower grades had been contributed by munition firms.

It is not to be assumed that they could be spared easily. On the contrary, the Army was claiming men who, if output alone had been considered, would not have been released. It is true that in the earlier part of the year revisions of programme owing to the reduction of tonnage and the cancellation of Russian orders involved a temporary diminution of employment in certain directions. But even here the workers principally affected were women; no considerable number of able-bodied men became available for military service, and in particular skilled men were not set free. The March offensive subjected the Ministry to a double strain. On the one hand, the Army had to have its men; on the other, the loss of material involved in our withdrawal demanded an immediate increase in the output of certain kinds of munitions to maintain our reserves. Successful production of munitions itself increased the difficulties of the firms producing weapons of war, and of the Ministry which directed them. The more aeroplanes, guns, tanks and weapons of precision supplied to the Army, the greater became the need of the Army for skilled men; and the more skilled men were drawn into the Army, the more urgent became the need for using to the full the ability of those who were left producing the Army's equipment. The Ministry had to push on with the work of dilution of labour, and of replacing as far as possible the workers who had gone by women or discharged soldiers trained in the schools under its direction. Without these steps, and especially without dilution, the munitions required could not be produced. But something more was needed. The mobility of skilled labour had to be increased. Dilution itself depended upon the distribution of skilled labour, and indeed of male labour in general. Hence the call for more War Munion Volunteers in May, and its complement, the system which came to be known as "the embargo system."

The coming of the Americans and the turn of the tide in France relieved the situation as regards recruiting. The Ministry was able to retain more of the men whom it needed, the number of releases for calling up falling to 2,000 or less a week. Still, nearly 130,000 fit men were released for service since the 1st January, 1918. The men went and the Ministry did its utmost by training, by dilution, by improved distribution of the skilled labour that was left, to diminish the difficulties which remained.

## THE ARMISTICE.

### The Problem of Demobilisation.

The immediate problem which confronted the Ministry of Munitions on the signature of the Armistice was of greater magnitude and gravity than was the case of any other of the public services, other than the Army itself, since it involved the rapid displacement of a large number of workers from among the 2,000,000 persons employed on munitions contracts, the shutting down of the manifold industrial activities concerned with the production of finished munitions, and the diversion from war to peace production of the great basic metal and chemical industries. The edifice moreover, which had thus to be torn down was based on a foundation of patriotic war enthusiasm and cemented by a community of national purpose, and these motives could no longer be relied upon to carry the country through the crisis.

*Demobilisation of Munition Workers.*—The displacement of labour from munitions industries could not be treated by itself, but had necessarily to be viewed as part of the wider question of labour transfer and resettlement, which concerned not only civilian workers, but to an even greater extent men demobilised from the fighting services. Under war conditions it had been found convenient, or even essential, that the Ministry of Munitions should retain responsibility for labour administration in war workshops, but, once the predominant aim of this industrial effort was removed, there was no justification for dealing with any class of labour otherwise than on a comprehensive civilian basis.

As soon as the Armistice was known to be impending, the first line of policy to be adopted was to dissociate labour administration from the problems arising out of liquidation of war contracts, the re-habilitation of industry and the disposal of surplus government stores of all kinds, which latter responsibility was placed upon the Ministry. Accordingly, the transfer of the Labour Department of the Ministry of Munitions to a Civil Department of Demobilisation and Resettlement, respon-



sible to the Ministry of Labour, was announced on 7th November, 1918. The discharge of munition workers henceforth proceeded in close consultation with the new authority, a breathing time being secured by the special holiday arrangements conceded to munition workers, who, later, were either transferred directly to other work or were afforded temporary maintenance under a scheme of unemployment grants. In consequence of these measures the closing down of munition factories was carried forward smoothly and continuously. By the end of the year employment in national factories had been reduced by 53,000 males and 117,000 women, being 39 per cent. and 69 per cent. of the numbers employed at the date of the Armistice.

*Administrative Re-organisation.*—The second task was to devise administrative machinery appropriate to the functions to be discharged. For a year and a half a departmental committee had been at work within the Ministry exploring the problem and formulating certain broad principles of procedure. The advisory body was transformed by Mr. Churchill into a Demobilisation Board, with full administrative authority, and, later, with the rapid cessation of wartime activities, furnished a model for a reconstituted Munitions Council. Under the new organisation the surviving functions of Supply were merged with the new responsibilities for Liquidation and Disposal. Under the original constitution of the Munitions Council the Supply Departments had been regarded as, to a large extent, self-contained business, grouped under Members of Council severally responsible for their general superintendence. Under the new organisation, the spheres of business assigned to Members of Council are functional rather than departmental, each department referring to the appropriate Member of Council with respect to questions relating to his particular function.

This organisation forms a convenient bridge over the transitional period during which the function of supply has to give precedence to the responsibility for liquidation and disposal, and will facilitate the building up in due course of an organisation competent to carry out the duties of a Ministry of Supply.

*A Moderating Policy.*—The way was thus prepared for the task of safely navigating the industry of the country through the inevitable commotion caused by the sudden change. Above all things, it was necessary to avoid extreme measures. However desirable in theory it might be to avoid the loss of a single ounce of industrial material or a single hour of useful labour, it was more important by far to preclude the possibility of allowing the inevitable disturbance from relapsing into industrial chaos, if only because it could not at first be completely certain that a revival of war industry might not be necessary.

Speaking to representative employers on 7th November, Mr. Churchill said :—

“ I am very anxious for you to realise that, although it will undoubtedly be necessary for some time to come for the Government of this country to intervene in industry, and to control and regulate aspects of industry, and, although it will also be necessary for international instruments to be kept in being for some time to secure the revictualling of the world, for the restoration of economic conditions in countries which are shattered—although both these conditions will be necessary for some time—our only object is to liberate the forces of individual enterprise, to release the controls which have been found galling, to divest ourselves of responsibilities which the State has only accepted in this perilous emergency, and from which, in the overwhelming majority of cases, it had far better keep itself clear. . . . But if peace should come this week, the first general direction which we are going to give to the munition firms all over the country is ‘ Carry on at a reduced speed until you receive further orders.’ I do not want an armistice to be followed by a sudden feeling of complete arrest of war industry here.”

*Relaxation of Control.*—During the next few weeks close attention was given to the task of facilitating the revival of peace industry, and particularly to the need for relaxing war-time restrictions, the maintenance of which was not absolutely essential. Foremost among these was the crucial question of iron and steel prices, and a restoration of a free commercial market for these products. The following announcement was issued to the Press on 2nd December :—

“ During the war, while the Government was practically the sole purchaser of iron and steel products, the Ministry of Munitions adopted the policy of stabilising prices in the iron and steel industries by paying direct to the makers certain increased costs due to war conditions.

“ Now that the Government is no longer the sole purchaser, it is desirable to place the industry on an economic basis as early as possible, but the great increase in prices which would result from an immediate withdrawal of all subsidies would seriously prejudice the resumption of ordinary commercial work and induce dislocation not only in the iron and steel trades, but in the wide field of engineering and other activities dependent on iron and steel.

“ The Government has therefore decided to remove the subsidies in two stages. Those applicable to steel making will be removed on 31st January, 1919, when a revised schedule of maximum prices for steel will take effect. Those applicable to pig iron will continue to 30th April, when it is proposed that all subsidies should cease entirely.”

Rapid progress was made in other directions, the results of which were summed up by Mr. Churchill in the following terms.

when speaking on the 23rd December to a joint conference of employers and trade union advisory committees :—

“ All restrictions on the purchase and manufacture of machine tools were removed almost immediately after the Armistice. The machine tool trade is reported to be doing well and to have numerous orders for peace work. Contractors in the possession of plant and machinery owned by the Ministry of Munitions are at liberty to use it for civil work on notifying the local superintendent engineer of their intention to do so. The only restriction is that the contractor must pay a reasonable hire for the use of the machinery in case he does not ultimately wish to purchase it. The great parent trade, the key trade, of machine tools, has been liberated and is functioning freely.

“ Iron and steel and non-ferrous metals may now be ordered and supplied and used without priority classification or reference number from the Ministry of Munitions. Stocks purchased and held by Government contractors may be used for any class of work. The control orders for dealing in non-ferrous metals without a licence are suspended in the case of tin, copper, brass, cupro-nickel, platinum, spelter, lead, chrome-ore, and type metal. Freedom is restored in all these cases. Prices have been fixed for the non-ferrous metals which the Ministry had in their possession: Very large stocks of these non-ferrous metals, some of great value, were in our possession ready for the campaign of 1919. We have put them on the market at prices which we believe will have a direct effect in encouraging trade. Supplies of industrial alcohol and glycerine have been released, and control orders have also been suspended in the case of the following materials :—Shellac, calcium carbide, benzol, naphtha, tar, chlorine, acetic acid, copper sulphate, etc.

“ The last in order of all this series of relaxations of Government control which we have been making daily and hourly in steady succession, and which we are continuing to do with all wise haste, is the relation of the priority of control of manufacture. Save in a few exceptional cases, all priority classifications for the execution of contracts for Government Departments have been abolished. Ordinary civil orders may now be placed and executed without priority permits or certificates. No further applications need, therefore, be made to the Priority Department of the Ministry of Munitions unless it is desired for national reasons to obtain a special priority for the order.”

*Supplies of Industrial Materials.*—It is not merely by the removal of restrictions on trading that the Ministry was able to facilitate the restarting of normal industry and by the use of Government owned building and equipment in contractors' works. Owing to its vast manufacturing activities the Ministry

was left in possession of great stocks of industrial metal, the approximate quantity available at the end of the year being :—

	Tons.
Pig iron ... ..	80,000
Shell steel billets ... ..	210,000
Ship's plates ... ..	19,800
Bright steel ... ..	5,000
Swedish bar iron ... ..	10,000
Copper ... ..	36,000
Spelter, G.O.B. ... ..	22,000
Spelter, refined ... ..	8,000
Soft pig lead ... ..	62,000
Aluminium ... ..	12,000
Nickel ... ..	2,100
Antimony regulus ... ..	3,500

With comparatively minor limitations these stocks were made available for commercial use.

*Placing of Government Orders.*—In order to prevent the collapse of production in consequence of the sudden withdrawal of orders on national account, authority was obtained directly the Armistice was declared empowering the Ministry to place interim orders, where necessary, for certain standard products. Thus, arrangements were made with the Railway Executive and the Board of Trade to place large orders, if necessary, for locomotives and wagons, such orders to be placed with special regard to the smoothing of the transition from war to peace industry. Other arrangements were made with the Local Government Board for placing large orders for articles required in connection with the Government's housing scheme, such as bricks, stoves and doors, steel casements, locks and ironmongery, ranges, stoves, sinks, lavatory and sanitary equipments, fittings for gas and electric cooking and lighting, and many others.

*Disposal of National Factories.*—Much careful thought was given to the post-war utilisation of National Factories other than those whose retention to meet military necessities might be essential. On the one hand there was an almost unlimited demand for storage capacity required to cope with the flow of material and equipment brought back from the fighting fronts. On the other hand, the Department was faced by the necessity for terminating the enormous volume of current output of munitions. For example, the production of filled shell, which during October averaged 47,000 tons a week, had been completely stopped before Christmas. The engineering shops, formerly working at highest pressure, were also forced, step by step, to shut down and conclude their activities in order that the shops might be cleared preparatory to their re-equipment for any post-war purpose. The necessities of the case largely precluded the possibility of continuous employment during the transition, although this was encouraged by every means which could be devised.

Once munitions activity had ceased, the question of ultimate disposal had to be faced. In a large number of National

Factories there was no alternative, since the premises were only in temporary occupation and were required for their normal peace-time use. Other examples requiring careful consideration were those of the large productive establishments built with Government funds and directly administered by the Ministry of Munitions. These cases are subject to the closest individual scrutiny, and before disposal to the public is decided upon, as has been done in the case of certain important establishments, careful investigation is made to determine whether their actual retention for any public use, whether national or municipal, is required.

*Termination of Contracts.*—When the Armistice was declared the outstanding contracts of the Ministry of Munitions for Supplies, other than Aircraft production, Explosives and Motor Transport, numbered 21,698 and represented an estimated unliquidated commitment of approximately £142,000,000 sterling.

Already, by the close of the year, a notice to terminate had been served in respect of 17,437 contracts, being 80 per cent. of the total number and 86 per cent. of the aggregate value, of which 12,276 or 55 per cent. of the total had already expired. The remaining cases represent contracts of which the supply was still required, the products of certain new 'key' industries such as the Optical and Glassware trades, or cases where it was more economical to complete the contract without giving notice, or articles whose production could not be suddenly terminated. Even in the latter cases arrangements for cessation of production at dates earlier than those provided by the contract were well in hand.

As regards aircraft contracts, the longer period of notice to terminate and the necessity, due to the nature of the supplies, for separate consideration of each contract militated against speedy liquidation. Further, from an economical point of view it was impossible to cancel a large portion of the work in progress on the 11th November, as it takes from five to seven months to complete aeroplanes, and it was desirable to arrange for the delivery of complete units rather than to accept semi-manufactured parts.

Notice determining the majority of the contracts for explosives and propellants was given immediately on the declaration of the Armistice, and in addition to the notice provided in the break clause, explosives contractors were instructed to discontinue manufacture except as regards raw materials already in process. Liquidation proceeded satisfactorily and it was anticipated that the loss due to cancellation would be comparatively small. Generally speaking the liquidation of contracts for chemical supplies also proceeded in a satisfactory manner due largely to the short term nature of the supply contracts and the absence of any serious obligations of a constructional nature. Deliveries of poison gas were stopped on the day of the Armistice and there have been no claims of any moment for compensation.

## CHAPTER IX.

**NATIONAL SERVICE.**

The last report of the War Cabinet brought the history of the reconstituted Ministry of National Service down to the beginning of the year 1918. The transfer of the recruiting functions of the War Office, which was a difficult and might have been a dangerous operation in time of war, had been successfully accomplished without disturbing the flow of recruits to the Colours. The Ministry had established a Regional organisation throughout Great Britain, whereby all the branches of its administrative work had been successfully decentralised. The collapse of Russia had made it clear that increased demands would have to be made on the nation's man-power, and the recruiting programme for 1918 had been settled on that basis, additional powers being given to the Ministry by the Military Service Act which became law on February 6th for the purpose of carrying it out. The German offensive on the Western front, which began shortly afterwards, profoundly modified these calculations, and the resulting crisis laid an even heavier burden on the new organisation of the Ministry than had been anticipated. The history of the Ministry of National Service during the year 1918 is dominated by the great national emergency of last spring, and is very largely an account of the steps which were successfully taken to find men to meet it.

**The Trades Union Conferences and the New Military Service Acts.**

The year opened with a series of conferences with Trade Unions under the presidency of the Minister of National Service, the object of which was to arrange a review of the Schedule of Protected Occupations, and the application of the principle of the "clean cut" to the younger men in these occupations, so that the programme, as already settled, might be fulfilled. In the course of the proceedings the Prime Minister explained in an important speech the necessity for an increased number of recruits which had arisen owing to the withdrawal of Russia from the alliance, and at the same time laid down the war aims of the Allies and the general conditions on which peace could be made. Some difficulties arose, mainly on points of procedure, but in the result the Union met the Government in a highly patriotic spirit, the Schedule was revised with their concurrence, the principle of the "clean cut" was established, and the First Military Service Act, 1918, was passed, enabling the Minister of National Service to cancel Tribunal Certificates of Exemption granted on occupational grounds, thus placing men holding Tribunal exemptions on the same footing as those protected by administrative action.

The progress of the German offensive, which began on March 21st, made it immediately necessary to accelerate and extend the

measures already designed for providing men for the Armed Forces of the Crown. The Military Service (No. 2) Act, 1918, which became law on April 18th, was accordingly passed through all its stages without delay, raising the military age to 51 (in the case of medical practitioners to 56), and giving additional powers to withdraw any certificates of exemption by proclamation in case of national emergency.

### **Progress of Recruiting.**

Immediate use was made of the powers provided by these two Statutes. Essential industries were once more passed under review, and quotas of recruits were called for from the Mines, from Railways and Transport, and later from Agriculture, and the raising of the military age widened the field while it added to the problems of recruiting. Proclamations were issued cancelling existing Tribunal certificates held by men born in the years 1895 to 1900, both inclusive, and narrowly restricting future applications by men born in those years. A series of withdrawal orders under the first Military Service Act, 1918, made available for service large numbers of fit men who had hitherto been left at their civil work in various important industries, and Tribunal exemptions in general were rigorously examined and reviewed in appropriate cases. The much smaller but important class of exemptions issued by Government Departments under Section 2 (2) of the Military Service Act, 1916, to men in their direct employment were also specially re-examined and sifted by special Committees appointed by the Minister of National Service, with the result that a further contingent of men fit for military service was released from civil duty by the Public Service.

The progress of events and the wider powers conferred by the new legislation naturally led to developments in the scope and technique of recruiting methods. The establishment of the Royal Air Force as an independent branch of His Majesty's Forces necessitated a revision of the former arrangements for the distribution of recruits. On April 2nd, Air Force Reception Depôts were established in each Region and National Service Trades Distribution Centres were also set up in order that men skilled in trades required by the Force might be sifted out and the best and most economical use made of their qualifications. These centres proved to be a most useful addition to recruiting organisation.

The Tribunals appointed under the Military Service Acts successfully continued, under the supervision of the Local Government Board and the Scottish Office, their difficult and onerous task of deciding claims for exemption. Their responsibilities were inevitably increased by the greater stringency of the demand for men and the raising of the military age. To meet the emergency a very large revision of Tribunal procedure was carried out, under the powers provided by the last Military Service Act, with the object of avoiding unnecessary delays. Steps were taken for the better control and co-ordination of the

action of National Service Representatives before Tribunals. Special departments for Tribunal work were established in the Regions, and, as the problems which arose became more difficult, it was found necessary to utilise as National Service Representatives full-time officials of the Ministry who were for the most part wounded and invalided officers who had seen service overseas.

In the circumstances, hardship in individual cases, and consequent criticisms and complaints, were inevitable. The essential service rendered by the Tribunals, as bodies constituted on a democratic basis, was that they held the balance with the general approbation and confidence of the public through a period of grave emergency—a significant testimony to the soundness and adaptability of the democratic institutions of the country which will not be overlooked by future historians of the war.

In addition to the existing recruiting conventions with Russia and France which continue in operation, similar conventions were made during this year with Italy, the United States of America and Greece. Steps were also taken to secure the return to this country for service of British subjects resident in neutral States.

Vigorous and successful action was taken to secure the recruitment of men who had evaded service by going from Great Britain to Ireland, and, at the same time, the Ministry by supplying expert staff gave important assistance to the scheme for the voluntary recruitment of Irishmen. Excellent work has been accomplished in Ireland often in the face of considerable difficulties, and an appreciable number of men was secured, principally for the Air Force.

Up to the Armistice about 5½ millions of men (exclusive of those already serving in the Navy or Army at the outbreak of hostilities in August, 1914) had enlisted in the United Kingdom for service with the fighting forces. In addition, approximately 3 million men were engaged at the beginning of November, 1918, on work in connection with the production of munitions and other war supplies. Between the foundation of the Ministry of National Service and the signing of the Armistice, over 700,000 men were added to the Armed Forces of the Crown.

### **The Work of the Medical Boards.**

The establishment of a civilian Medical Department for the examination of recruits was an essential feature of the scheme for the reconstitution of the Ministry of National Service, and in the course of the past year the arrangements for medical examinations were completely remodelled and successfully developed on new lines. The Department was greatly assisted from the outset by an Advisory Board composed of distinguished civil practitioners, including representatives of the General Medical Council, the Central Medical War Committee, the Committee of Reference and the Scottish Medical Services Emergency Committee and of the medical profession at large. With the co-operation of these collaborators, steps were immediately taken to set up a new system of grading in substitution for



the old medical categories, and a code of instructions as to standards of physical efficiency was drawn up for the guidance of the new Boards in carrying the system into effect.

The new Recruiting Boards were in working order all over the country before the end of 1917, and the code of instructions with regard to physical standards was issued without delay. This code was afterwards developed and revised in the light of experience gained. The greatest attention was paid to the question of accommodation and to the comfort and considerate treatment of the men examined. Special instructions were also given as to (1) the reception and full consideration of medical certificates from general practitioners and consultants; (2) the provision of privacy when desired; (3) the re-examination of men dissatisfied with their grading or at the request of Tribunals. As regards the composition of the Boards, great care was taken in the selection of Chairmen; and the panel system was introduced whereby the members of the Board were drawn from as large a circle as possible of the best local civil practitioners. This ensured the work being widely distributed, supplied safeguards against the employment of those unsuitable for the work, and made the whole system capable of expansion in times of pressure.

In order to meet legitimate grievances which had arisen under the old system it was arranged that machinery for appeals should be established which should work quite independently of the Ministry of National Service. Men who were not satisfied with their grading by the National Service Medical Boards were given the right of applying to their Appeal Tribunals to be examined by Medical Assessors, a body appointed by the Local Government Board and the Scottish Office, and including leading physicians and surgeons.

The great stimulation of recruiting in the second quarter of the year severely taxed the capacity of the National Service Medical Boards, the total of examinations and re-examinations carried out since January 1st reaching the remarkable figure of nearly  $2\frac{1}{2}$  millions. It was inevitable in the circumstances that there should be occasional criticisms of their findings, but the fact remains that the number of appeals to the Appeal Tribunals during the same period did not amount to  $1\frac{1}{2}$  per cent. of the examinations, of which approximately one half were disallowed by the Tribunal, while of the remainder, which went before the Medical Assessors, the grading in half the cases was upheld.

It must be remembered, in appreciating this highly satisfactory result, that the difficulties inherent in the administration of the medical side of compulsory service in a country to which the whole idea of conscription was novel and distasteful had been intensified by the raising of the military age. New problems of grading arose of which the medical profession had no experience, and special arrangements for dealing with them had to be devised at very short notice. That in these circumstances the average error should be represented by a fractional percentage reflects the greatest credit on the professional skill and conscientiousness of the members of the Boards.

### **Distribution and Control of Medical Man-Power.**

Three other duties of scarcely less importance were assigned to the Medical Department—the supply of Medical Officers to the Armed Forces, the maintenance of an adequate medical service throughout the country for the civilian population, and the regulation of the supply of medical and dental students for future, as well as for present, needs.

In this arduous and difficult work the officials of the Ministry were greatly assisted by the Advisory Board and the Central Professional Committees, and it was found possible to supply the necessary number of Medical Officers to the Government Services, in accordance with their real requirements, without encroaching too far on the medical needs of the civil population. This necessitated the elaboration of new machinery, and the Central Professional Committees were given tribunal powers to deal with the Profession. Special travelling Boards for the examination of doctors were formed, and completed their work all over the country between the middle of June and the middle of August. The field of selection was much widened by the extension of the age of compulsory service for medical men to 56; nevertheless, the endeavour to meet the needs of the fighting services placed the utmost strain on our medical resources, and the most careful economy in their distribution was one of the chief responsibilities of the Department.

The steps taken to obtain the return from the fighting forces of men who, prior to enlistment, had been second year or more advanced medical students, and to protect from the action of the Military Service Acts students at a similar stage of study, proved efficacious, and procured a number of medical students sufficient to furnish an adequate annual supply of medical practitioners for the next five years.

Dental Tribunals to deal with dental surgeons were also formed, and a carefully considered scheme of exemption for dental students was worked out, with due regard to the needs of the civil population.

In the late summer an Inter-Departmental Committee on Medical Services was set up by the Minister, which was authorised by the Departments concerned, and by the War Cabinet, to regulate the demobilisation of medical practitioners serving in the Armed Forces. Subsequently the demobilisation of registered dental surgeons was also committed to the care of this Committee. The conclusion of the Armistice coincided with the outbreak of a very serious epidemic of influenza, and the demands of the civil population for medical attention increased enormously. Steps were at once taken to demobilise from the Armed Forces (principally the Royal Army Medical Corps) a considerable number of medical practitioners to meet the most urgent civil needs. Temporary leave to return to civil practice was also granted in a large number of cases, and by these means the worst of the epidemic was tided over. Arrangements were also made by this Committee, in conjunction with the Central Professional Committees, for a scheme of priority, based on age, length of service, marital condition, circumstances connected with prac-

tice, etc., upon which medical officers would be demobilised as soon as the general demobilisation began. Strictly analogous arrangements were made for the demobilisation of dental surgeons.

### **Discharged Soldiers and Pensions Awards.**

During the year the Department assumed responsibility for the Medical Boards at Discharge Centres. It has been the function of these Boards to examine and grade soldiers no longer fitted for military service or superfluous to requirements and passed to the Reserve or demobilised from the Army to do work in shipyards, coal mines, etc. The Department also undertook the provision and conduct of the Boards for the re-examination of discharged disabled soldiers, sailors, marines and airmen for review of pensions. The interest and importance of the Pensions Board work is gaining general recognition. Its volume is large, and the numbers dealt with show a progressive increase. From May 1st to December 31st, 127,052 Pensioners were examined, and during the latter part of that period examinations were carried out at the rate of 7,200 cases a week.

At first the examination of Pensioners had been undertaken only in the four Southern Regions, *i.e.*, in the Regions south of a line from the Wash to the Severn. Afterwards Pensions Boards were opened in Region after Region, and by the beginning of November had been established all over the United Kingdom. Elasticity of organisation and the cordial co-operation of all branches of the medical profession enabled the Boards to meet these extended requirements without difficulties other than those which were inevitable owing to the paramount and competing claims of the fighting services.

### **The Health of the People.**

One result of the medical work of the Ministry of National Service deserves special consideration, as it contains the promise of a contribution to the permanent welfare of the community long after the present emergency has passed away. The vast numbers of medical examinations which have been carried out during the war have provided material for a closer and more extensive survey of the physical condition of the male population than has ever previously been possible. The preliminary examination of this material by Professor Keith and others has already yielded remarkable results, and it provides an invaluable basis for sociological investigations of urgent importance. In order that this great body of anthropological facts recorded by skilled observers might be turned to good account in the public interest, it has been submitted to a scientific committee of the Advisory Board, assisted by one or two eminent authorities specially appointed. There can be no doubt that the result of their investigations will form a solid basis for the remedial measures which will become the duty of the future Ministry of Health.

### **The Technical Bases of Man-Power Policy.**

Administrative detail is of little general interest, but some space should be given to the work which was an indispensable

condition of the success with which the inherent difficulties of carrying out a system of conscription in this country have been overcome. That work involved great innovations in administrative practice and a departure from the national traditions which was almost as great as conscription itself. For the public the results of the application of the Military Service Acts are most clearly reflected in the executive activities of the Recruiting Department of the Ministry in London and the provinces, and ultimately in our victories in the field. But these activities would not have been possible, or, if possible, might have been disastrously misdirected, had they not been founded on the research and organisation carried out by another side of the Ministry. From the time when it became necessary to reduce haphazard pre-war methods of recruiting to a system, it was clear that the basis of recruiting must be a complete and accurate record of every male person of military age remaining in civil life and of those who had already been withdrawn for military service. Such a record was available before the war in almost every modern European State, but was entirely foreign to British ideas and experience. The first step towards the present highly developed organisation was the National Registration Act, 1915. On the information supplied by the Local Authorities to the military under the provisions of that Act was based a military register which was the necessary foundation of the earlier administration of compulsory service. The Register was taken over from the War Office on the organisation of the Ministry of National Service, and was afterwards so far improved and elaborated that an exact picture could be presented of the Man-Power situation at any given time.

In conjunction with the Local Government Board steps were taken early in the past year to amend and extend the provisions of the Act of 1915 by the National Registration (Amendment) Act, 1918. This Act made the registration of all youths attaining the age of 15 since 1915, and of men discharged from the Armed Forces compulsory. It also required notification of all changes of occupation.

Closely allied with Registration, and united with it in a single Department of the Ministry of National Service, was the statistical work on which was based the advice tendered by the Minister to the War Cabinet on questions of man-power and, ultimately, the whole recruiting policy of the Government. The work of the statistical officials was of peculiar value during the critical months in which the whole field of the remaining man-power of the country had to be re-surveyed, and the national requirements for vital civil and industrial activities re-calculated in the face of a great emergency. The system of statistics which had been introduced enabled a complete account of the man-power situation to be at once produced, dealing not only with the number of men who could be made available as reinforcements for the Army, but with their occupations, age groups and medical grades. The policy which was followed by the Government had to be most carefully prepared on accurate information, so that the maximum number of men was obtained with the minimum

disturbance of industries, more especially those engaged in furnishing the Allies with supplies of all kinds necessary for the war, and in providing food and other necessities for the civil population. The right direction of recruiting policy and administration depended entirely on the accuracy of this statistical work and—especially in view of the serious difficulties which had been created by the German submarine campaign—any miscalculation might have been as fatal to the war effort of the country as a military disaster.

When the recruiting policy had been settled by the War Cabinet it became the task of the Registration and Statistical Officials to allot to the areas in each Region throughout Great Britain the quota which, having regard to the forms of industry peculiar to the area, it was thought capable of furnishing, and thereafter to regulate the flow of recruits so that the numbers allocated were obtained in time to enable the men to be trained to take their place in the field before the fighting months of 1918 were over.

The complete Recording system established by the Ministry of National Service has been closely investigated by distinguished representatives of the corresponding Departments in certain of the Dominions and in several of the Allied countries, all of whom have expressed the highest appreciation of the methods which have been adopted.

### **The Conservation of Trade.**

One of the most important and difficult branches of the policy by which recruiting under high pressure was guided during 1918 was that which dealt with the recruitment of men engaged in the trades included in the List of Certified Occupations. The special duty of maintaining a balance between the demands of the military situation and the maintenance of Home industries (other than munition making), both for civil and war requirements, belonged to the Reserved Occupations Committee which, on the reorganisation of the Ministry of National Service was associated with its Trade Exemptions Department.

The Withdrawal of Exemption Orders, under the provisions of the new legislation of this year, and a concurrent revision of the List of Certified Occupations, which provided a very large number of the recruits obtained, were prepared by this Department whose powers and responsibilities were greatly increased by the raising of the military age. The whole purpose of the Orders was to obtain the largest number of high category men in the shortest possible time. Consequently there was little opportunity of consulting the various trades on the probable effects of the Orders, and the Department had to act for the most part on their knowledge of the state of industry. They had, however, the advantage of the assistance of three of H.M. Superintending Inspectors of Factories, and discretionary powers given to the Regional Directors of National Service provided a safeguard against any action which might have been gravely injurious to industry in individual cases.

The revision of the List of Certified Occupations was seriously affected by the raising of the military age, and by the increased demands for clothing and other supplies for Allied armies, consequent on the arrival of large American contingents and the intervention of Greece on the side of the Allies. Special allowance had to be made for these factors in preparing the new List, particularly for the fact that a very large proportion of the managing and directing staffs are found in the age-groups between 43 and 50. A number of trades, whose continuance and power of recuperation after the war are essential in the national interest, were also admitted to the List, and certain further alterations were made with a view to bringing it into more complete harmony with other forms of administrative protection. A new limitation on the National Service Representatives' power of challenge, restricting it to definite and specific grounds applicable to the individual case, gave great satisfaction to the Trades concerned.

In addition to the preparation of the two Withdrawal of Exemption Orders and of the Certified Occupations List, the Department was called upon to advise on a large number of trade questions, many of them arising out of the restriction of imports and the consequent shortage of raw material and danger of unemployment. Special attention was given throughout the year to the protection of men engaged in the essential food trades. Administrative protection was given to men employed in flour mills, margarine manufacture and other specially important food industries, and a general agreement was reached for the co-operation of the officials of the Ministry of Food and the Ministry of National Service in the provinces in dealing with any cases arising in the food producing and distributing trades. This agreement and a similar arrangement with the Road Transport Board worked very satisfactorily.

For the guidance of the respective Regions in dealing with cases coming before Tribunals, Consultative Committees were established in a number of trades, including the Cotton Trade; the Bleaching, Dyeing, Fabric Printing, and Textile Finishing Trades; the Lace Trade and the Boot and Shoe Trade. A Committee was also established in the Slate Mining and Quarrying Industry of Wales, to advise upon the issue of administrative protection certificates in that Region. In addition, the Trade Exemptions Department (in common with the other Departments of the Ministry) had instructions to consult with the Industrial Councils which were established by the Ministry of Labour in a number of industries; and the Industrial Councils for the China Clay Industry, for the Plumbing Trade, for the Match Manufacturing Industry and for the Building Trade were the first to be consulted.

Besides dealing with the position of whole trades in this way, the Trade Exemptions Department also advised upon individual claims for protection or for release from the Colours. This branch of the Department's work does not lend itself to description in a report, but it was none the less important, for, as trades became more and more depleted by recruiting, the more necessary

it became to give attention to individual cases. The number of individual cases dealt with was very large, and many of the applications were made in person.

### **The One-Man-Business Scheme.**

Men who were owners of businesses which they conducted single-handed were treated with every consideration compatible with military necessities, and arrangements were made for helping them to meet their special difficulties.

As the result of a number of conferences with representatives of Chambers of Trade, and of the principal organisations of One-Man Business proprietors, the Local Government Board issued a Circular to Tribunals recommending them to grant exemption to proprietors of one-man businesses, if in Grade III, on condition that they undertook work of national importance. For the purposes of this concession, men were regarded as engaged in work of national importance if they consented to help to keep going the businesses of men called to the Colours.

Special arrangements were also made by the Local Government Board for stimulating schemes of co-operation among traders for maintaining the businesses of men who had joined the Forces. Various schemes were adopted. The simplest was that whereby a man undertook to help in the carrying on of the business of a fellow tradesman who had joined the Forces; in one instance, one man was supervising the carrying on of no less than ten businesses. Another and fuller scheme was one where the arrangements were made and carried out under the supervision of a representative body of local tradesmen. In two instances, tradesmen went so far as to pool their own businesses, include those of men who had joined the Forces, and carry them all on as one concern. The experiment produced very good results.

### **The Retail Business (Licensing) Order.**

The need for some measure of protection for the business interests of serving soldiers became obvious in the course of the negotiations with the One-Man Business proprietors. One of the chief complaints of these traders was that, when they were called to the Colours, unscrupulous competitors, often aliens, opened a shop close by and stole the business of the serving soldier. The Order was primarily designed to put a stop to this species of robbery, and at the same time to prevent the employment of unnecessary labour in opening shops for which there was no real demand.

No less than 12,500 applications for licences were received in the first seven months of the administration of the Order, and, apart from those who were restrained by the mere existence of the Order, over 1,000 businesses which were handicapped by the absence of men on service were protected from threatened competition. Only about 10 per cent. of the applications were refused as likely to offend the expressed objects of the Order.

In the final stages of the war there was an increasing number of applications from discharged soldiers. Many men had been incapacitated from manual work, and their proposed entry into trading was viewed sympathetically in administering the Order. Its continuance during the period of demobilisation has proved to be of the greatest possible value, not only in safeguarding the interests of returning soldiers, but also in providing the means of eliminating undesirable applications.

### **National Labour Supply.**

One of the fundamental duties of the Ministry has been the co-ordination of the civil with the military side of National Service. This implied the control and direction of supplies of man-power for national industrial requirements, a duty which became more than ever important and difficult when it became necessary to make very large demands on the workers in essential occupations.

The work of the National Labour Priority Committee was successfully continued throughout the year.

The essential feature of the position being a great excess of labour demand over supply, it was obvious that a strict limitation of priority to really urgent demands, in order to concentrate such labour as was available on these demands, was the only possible manner in which real and effective aid by means of priority could be given. This was accordingly the practice of the Committee, which, in the course of its operations, regrouped and reclassified the labour demand of the country. This Committee also became responsible to the Minister for the allocation of prisoners of war in this country, thus enabling it to review all sources of supply and incidentally to obtain the economical and effective use of prisoner labour.

In order to insure rapidity of action governed by a full knowledge of local conditions, the direction of labour supply was largely decentralised. For this purpose a committee was established in each Region, consisting of representatives of the Admiralty, the Ministry of Munitions, and the Ministry of Labour, under the presidency of a Regional Officer of the Ministry of National Service. These Committees' functions included the determination of priority within the regions, the decision of questions relating to the transfer of labour, and the stimulation of substitution.

### **Reinforcement of Industry.**

The accumulation of industrial knowledge made it comparatively easy to ascertain the labour demands and to determine their relative priority. But the task of satisfying these demands became progressively more difficult. The labour of the country was reinforced in many ways; by the enrolment of War Work Volunteers and the War Agricultural Volunteers; by the holiday work of school boys; by the utilisation of part-time labour; by the provision of military working parties; by the release from the Army of men who would be more usefully employed in civilian life; and by other direct and indirect methods.



The number of enrolments under the War Work Volunteer scheme, under which men were transferred to ascertained vacancies in work of national importance, reached a total of nearly 30,000, and the scheme was varied and developed from time to time to meet changing circumstances.

The War Agricultural Volunteer scheme, a special effort to supplement agricultural labour resources, was launched in the Spring, and proved very effective, over 4,000 men being enrolled and placed on agricultural work by this means. A particularly satisfactory feature was that, although no person actually employed in agriculture was enrolled, yet of the persons obtained for the work over 60 per cent. had some previous agricultural experience.

The plans made for placing on the land school boys who were prepared to give up part of the holidays for harvest work also worked very well in practice. 700 schools were approached, 360 camps were formed and 15,500 boys were obtained, about four times as many as last year. In addition some 13,000 boys were mobilised for work in connection with the flax crop—very largely from the City of London, where a special office was temporarily established for the purpose.

Special acknowledgment should here be made both to the War Office and to the Dominion military authorities for the assistance they gave to agriculture at the instance of the Ministry of National Service by lending skilled agriculturists—chiefly ploughmen—to work on the land during the Spring.

Part-time labour, the value of which was somewhat sceptically regarded a year ago, was developed to a surprising extent by the efforts of the Department in co-operation with local authorities. In November, 1917, there were only two or three active Part-time Committees in existence, whereas in November, 1918, there were more than 320 such Committees at work up and down the country under the auspices of the Ministry of National Service. The work of these Committees since their formation was estimated to have provided no less than 2,400,000 hours of work. The control of these part-time schemes has now been taken over by the Food Production Department of the Board of Agriculture and Fisheries. The Ministry, moreover, realising that it was important that part-time labour should be employed in many serviceable ways which did not involve ordinary industrial pursuits, compiled and issued a Directory of Government Department and national organisations requiring voluntary labour, which directed into useful channels the services of a number of willing helpers who might otherwise have been unable to discover in what direction assistance to the national cause should be given.

Part-time Committees were of very great assistance to tribunals in placing men exempted from military service on condition that they obtained part-time work of national importance.

All applications for the release from the Army of serving soldiers for work of national importance were dealt with by the Ministry, which, being responsible for the proper allocation of man-power, was considered to be best qualified to decide whether the employment for which the soldier was required was of sufficient national importance to justify his release from military service. The Branch dealing with Release from the Colours was transferred to the Department of Demobilisation and Resettlement (Ministry of Labour) shortly after the signing of the Armistice on November 11th, 1918.

This work naturally involved elaborate local enquiries into the particular cases with which the branch had to deal. During the twelve months under review nearly 42,000 individual applications were dealt with, but it is interesting to note that the public appeared to realise fully that the comparative needs of the fighting forces and of industries must vary from time to time, and during the critical period in March and April, when our fortunes in France appeared to be at a low ebb, the number of applications for release fell rapidly. When the German rush towards Amiens was stopped the applications for release grew more numerous, only to fall again when Messines Ridge was lost and the German Army was threatening the Channel Ports. In addition to individual releases the Department dealt with large schemes of bulk releases from the Navy, Army and Air Force, *e.g.*, in connection with shipbuilding, coal mining, blast furnaces, &c.

The control of building licences, which was originally in the hands of the Ministry of Munitions, was transferred to the Ministry of National Service in the beginning of the year. The object of this control was, of course, to restrict the employment of labour and materials upon building or constructional work which was not of vital importance to the prosecution of the war. In this way much labour was made available for national work.

Nearly 3,000 applications for licences, involving work of a value amounting to about £1,500,000, were dealt with. Inasmuch as the corresponding amount of private work in normal times might probably be put at about £100,000,000, the enormous diversion of effort from private to national work may be appreciated.

### **The Work of Women.**

The share taken in the national effort by women was worthily maintained during the final year of the war. Fully six millions were latterly engaged on whole-time work, a great part of which was essential to the war effort of the country. Of these it is estimated that a million and a half acted as substitutes for men who were called to the Colours, while another quarter of a million were actually in uniform, as nurses or in one of the women's corps attached to the Navy, Air Force or Army. Serving in France alone in March, 1918, there were no less than 6,500 of the Queen Mary's Auxiliary Army Corps. The recent investigation of the man-power retained in

the various Departments of the Civil Service showed that it has been found possible to carry the enormously increased burden of public administration with an actual decrease of 57,000 male civil servants. This is in itself a remarkable war achievement, and it is largely due to the competence and the devoted work of the 108,000 women who have been temporarily or permanently added to the Civil Service since August, 1914. It may, indeed, be said that not only has the devotion of British women helped to solve the endless industrial problems, aggravated by the special difficulties of the past year, of the distribution, dilution and substitution of labour under war conditions, but it has revealed a source of national strength whose existence had never been fully realised.

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When the first report of the War Cabinet was published the new organisation of the Ministry was completely designed, but still in process of construction. The past year saw it in full working order under a sudden and unexpectedly severe strain. It had to administer a series of complicated enactments affecting the lives and fortunes of the community in a manner unprecedented in the history of this country. Once the danger was realised the courage and patriotism of the population did not hesitate to accept the drastic measures and the heavier sacrifices which had become inevitable, but the administrative problem of greatly and rapidly increasing the reinforcements of the Army was in the circumstances very difficult, and was aggravated not only by the depletion of the man-power of the country after four years of war, but by the unsystematic methods of selection, which could not be avoided in the earlier days of volunteer recruiting. It may be claimed that the various activities of the Ministry were successfully co-ordinated, and that results of the highest value to the Allied cause were secured. The effect of the legislative and administrative measures which were taken was immediately apparent in the period succeeding the commencement of the German attack and the full advantage of the great national effort of 1918 is now being reaped. The numbers of recruits posted increased very rapidly indeed between the end of March and the end of June, and soon reached a figure which many would have deemed impossible without wrecking the essential industries of the country. While, however, the flow of recruits was satisfactorily maintained, men were also found in numbers sufficient to provide for essential supplies of munitions and other war requirements of ourselves and our Allies, for shipping and food supplies menaced by the submarine campaign and for the vital needs of the civil population. There is no more remarkable episode in the history of this country than the supreme effort which was made during the last twelve months. The year 1918 saw the steady and progressive development of the manufacture of munitions for the Allied Armies, a great expansion of our Air Force, an intense

anti-submarine campaign, with all that it meant in naval expansion and naval devices, continued and increased shipbuilding, and, side by side with all these activities, hundreds and thousands of men recruited for our armies, enabling them to win their crowning victories. Such an achievement would have been impossible unless the determination of the men and women of the country had been coupled with a complete and effective organisation of the whole power of the nation for the common end.

## CHAPTER X.

**INDUSTRIAL RELATIONS.**

As the War proceeded, its influence on industrial and social conditions became more and more profound. It not only revolutionised the conditions of production in large sections of industry, for the time being at any rate, by introducing women's labour in place of that of men, and by developing repetition work and standardisation to an unprecedented extent, but it has also created a new social atmosphere in which the old ideas as to industrial conditions and industrial life are struggling against inevitable extinction. The public mind has thus been prepared for a new order of things in industry after the War, with the result that reforms which a few years ago could only have been carried out in the face of bitter and prolonged opposition were effected during the past year with the general consent of all parties. It is to this new spirit that may be ascribed the success which has so far attended the measures taken by the Government to lay the foundations of a reconstruction of industry.

**Joint Industrial Councils.**

In Chapter 10 of the War Cabinet Report for 1917 reference was made to the recommendations of the Whitley Report. At that time the Ministry of Labour had circulated the Report to the principal Employers' Associations and Trade Unions in the country inviting them to get together in each industry with a view to forming Joint Industrial Councils. Although the replies received had been almost uniformly favourable to the scheme, only one Industrial Council had at that time been actually established, viz., in the Pottery industry, for which negotiations had been in progress before the Whitley Report was actually published. It may be said, therefore, that the Whitley Report was still but an idea. It was still uncertain whether it would prove acceptable to employers and workpeople when an attempt was made to put it into operation, or indeed whether it would prove to be practicable at all when actually applied to industry. Although it was realised by the Government that it contained great potentialities and that without some such machinery as it provided it was difficult to see how the future problems of industry could be solved, it was none the less obvious that it could not be imposed upon industries against their will, and could therefore only produce practical results if it were taken up by employers and trade unions with the determination to co-operate in order to make it successful. It is probably not too much to say that the experience which has been gained during the past year removed such doubts. In spite of many difficulties, a very considerable part of the field of organised industry is now covered, or on the way to being covered, by Joint Industrial Councils, and, although they have not been long at work, enough has been seen of the spirit in which they have been

formed and of the results which they are producing to engender the belief that their formation marks a new epoch in the history of industry and will prepare the way for a better future for employers and workpeople alike.

In spite of the steps taken to make the recommendations of the Whitley Report widely known and to secure discussion thereon, the practical response to the invitation of the Minister of Labour that industries should take in hand the formation of Industrial Councils was slow, partly through the preoccupation of the officials of the various organisations with questions of more immediate importance, partly owing to the reluctance of Employers and Trade Unions to make the first move for fear of prejudicing their position. The Minister therefore decided to call together representative conferences of Employers and Trade Unions in the well-organised industries, and the Department proceeded to get into touch with the leading Employers and Trade Union Officials in order to clear the way for the summoning of such conferences. Many preliminary obstacles had to be overcome, but during 1918 a series of conferences were held resulting, in practically every case, in the appointment of a Joint Committee to draft a constitution for a Joint Industrial Council, and to settle which organisations should be represented upon it, and in what proportions. No attempt was made to force the scheme upon industries which were found to be reluctant to adopt it, and it may therefore be inferred that its widespread adoption indicates the strength of the demand for some such machinery in order to deal with the problems of industry.

Each Drafting Committee was free to elect whatever form of constitution and whatever objects seemed best to it, but in order to assist them in their work the Ministry prepared a model constitution, based on the suggestions made in the Whitley Report itself, which has usually served as a basis for discussion. Although the constitutions which were drafted naturally varied considerably, the keynote of all of them was the advancement of the industry and the improvement of the conditions of all engaged in it by means of joint action between employers and workpeople and by their association in its government. Among other objects which appeared in various constitutions might be mentioned the following :—

1. The regular consideration of wages, hours and conditions.
2. The consideration of measures for regularising production and employment with the object of securing to the workpeople the greatest possible security of earning.
3. The consideration of existing machinery for the settlement of differences and the establishment of machinery for this purpose where it does not already exist.
4. The consideration of measures securing the inclusion of all employers and operatives in their respective organisations.

5. The improvement of health conditions.
6. The study of processes and design.
7. The supervision of entry into and training for the industry and co-operation with the Education Authorities in arranging education in all its branches.
8. The provision of a graduated scale of minimum rates designed to maintain wages as nearly as possible on a level throughout the country.
9. The better utilisation of the practical knowledge of those engaged in the industry.

From these objects it will be seen that the Councils intend to undertake a thorough revision of the conditions under which the industry has hitherto been carried on, and to attempt a readjustment of them in such a way as to promote greater prosperity for all concerned and a real intimacy of co-operation between employers and workpeople now associated together in its government for the first time. Some instances are given later of the work actually accomplished.

The Councils themselves consist in every case of an equal number of representatives of employers' and workpeople's associations, with a chairman, vice-chairman and officers elected from the members of the Council. In three industries a Trade Union representative was unanimously elected as the Chairman of the Council, and this precedent will no doubt be followed in other cases. It is typical of the spirit in which the Councils are setting about their work, and it is upon this spirit rather than on the actual existence of the Councils themselves that their usefulness in the future will depend.

By the end of the year 1918, Joint Industrial Councils had been established in the following 19 industries—Pottery, Bedsteads, Building, Gold, Silver and Horological and Allied Trades, Furniture, Rubber, Matches, Silk, Chemicals, China Clay, Vehicle Building, Baking, Leather Goods, Hosiery, Paint and Varnish, Bobbin and Shuttlemaking, Hosiery (Scottish), Woollen and Worsted (Scottish) and Sawmilling. These industries employ some 1,800,000 workpeople. In addition to these 19 Councils which have already held their first meetings, Joint Committees were engaged in drafting constitutions in the following 17 industries:—Boot and Shoe, Cablemaking, Commercial Road Transport, Electricity (Power and Supply), Electrical Contracting, Printing, Roller Engraving, Surgical Instruments, Tinplate, Tin-mining, Tramways, Woollen and Worsted, Newspaper, Paper Making, Waterworks, Heating and Domestic Engineering, Municipalities (non-trading services), covering 1,000,000 workpeople, while conferences or negotiations had also taken place in a considerable number of other trades in some of which Joint

Industrial Councils will be established in the near future. It will be noticed that among the industries in which negotiations have reached an advanced stage, are the services in which municipal enterprise is most common. This development is due to the hearty support of the principle of the Whitley Report and co-operation in giving effect to it by the representative associations of the Local Government Authorities concerned. The parallel case of Government employment of an industrial character was considered by the War Cabinet, who approved in principle the application of the Whitley Report to Government Services. The details of application were defined in an unanimous report by a Committee under the chairmanship of the Minister of Labour, and an early development in this field may also be expected. To sum up the results at the end of 1918, it may be said that there were 36 Councils formed or in formation covering nearly 3,000,000 workpeople—a noteworthy achievement in the space of 12 months, when full account is taken of the formidable obstacles which stood in the way of any co-operation between employers and workpeople.

It will be seen that six of the largest trades of the country are not included in the lists given above, viz. :—Shipbuilding, Cotton, Coal-mining, Iron and Steel, Engineering and Railways. In each of these cases special difficulties exist, and it was found, not unnaturally, that the larger the industry, the greater were the obstacles to be overcome, owing to the complexity of its existing organisation and the difficulty of reconciling the views of the various bodies concerned, where they were not previously accustomed to working together. It is, therefore, to be expected that the largest industries will be the last to adapt themselves to the new scheme. It has also to be remembered that these are the industries which are already the best organised, and therefore feel the least need of the new machinery. On the other hand, none of them has at present any joint body with functions as wide, or a constitution so definite, as those of the Joint Industrial Councils which have been formed. In the Cotton Trade, however, which is perhaps the most highly organised of all, there already exists in the Cotton Control Board a Joint Committee of Employers and workpeople, who have carried out the most difficult task of regulating the industry in the face of the great difficulties which have beset it during the War. The Cotton Control Board, though set up for a particular purpose, has in fact been performing most of the functions of a Joint Industrial Council, and it is not unlikely that it may continue under some different form after the War. The Shipbuilding Industry has also set up a National Joint Committee, which is dealing with the various problems arising out of the War in the industry, and will no doubt be able to act for it during the reconstruction period. Under its auspices district and yard committees are being formed throughout the country. In the case of coal-mining a start has been made by the formation



of Joint District Committees and Joint Pit Committees in the "Federated Area." In the other three industries referred to it may also be expected that progress will gradually be made towards the establishment of a Joint Council with full powers, but in the case of Engineering the abnormal conditions created by the War make progress on permanent lines very difficult.

The formation of National Joint Councils, however, was only one part of the scheme proposed by the Whitley Committee for promoting better relations between employers and employed. The experience of the War has shewn sufficiently clearly that industrial conditions are so various and complex that they cannot be effectually dealt with on any centralised system, and that it is therefore necessary to devise some method of devolving responsibility on to local bodies, who will be able to deal with local difficulties and local conditions in a prompt and effective manner. For this purpose, the Whitley Committee recommended the creation of District Councils and Works Committees, which are as important a part of their scheme as the National Councils themselves. These bodies can, however, as a rule only be formed after the National Council has been brought into existence, which can determine the areas which the District Councils should cover, define the functions which they shall perform, and lay down the general principles on which Works Committees should be established in their industry. Most of the Industrial Councils already formed are proceeding to form District Councils, and some have already dealt with the question of Works Committees.

The problem of Works Committees presents the most controversial, but perhaps the most important, feature of the whole scheme. It is not enough that employers and workpeople should be associated together at the centre on a Joint Industrial Council. If a thorough understanding and real co-operation are to be promoted between employers and their workpeople, it can only be done by a more direct contact being established between the individual firm and the individual workman employed by it. One of the chief causes of unrest in recent years has been the feeling which has grown among the workers that they are simply cogs in a huge machine, with which they have no personal contact and over whose movements they have no control. The old human relationships, which did so much to preserve mutual sympathy and understanding between employer and workpeople, have been largely destroyed by the increasing scale on which modern industry is conducted. They must be re-established on a broader and more democratic basis, if there is to be lasting peace in the industrial world.

The creation of Works Committees is therefore an integral part of the Whitley Scheme. But the problems connected therewith are far more difficult than those arising out of National or

District Councils, and the Whitley Committee in their Third Report dealing with this subject recommended that an inquiry should be made by the Ministry of Labour into the constitution and working of existing Works Committees. This inquiry was undertaken and a Report issued. It gives examples of Works Committees in a number of different industries, including Engineering, Shipbuilding, Iron and Steel, Boot and Shoe, Coal-mining, Woollen and Worsted, Pottery and Furniture, and it prints *in extenso* particulars of the constitution and working of 23 different Committees with opinions, gathered from employers and workpeople, as to their effectiveness. It shews the various difficulties which have been encountered as regards constitution, procedure, relations with trade unions, and other matters, and indicates the methods by which they have been overcome. Some very remarkable instances are cited of the valuable results which these Committees have produced, and many of the objections which have been commonly urged against them are shewn to have little real foundation. To quote the Report: "In more than one Works the summary of opinion on a Works Committee—and that not on one side only, but on both—has been expressed in the phrase, 'This is the best thing that has ever happened in the shop.' Such a summary could not be given if experience had not proved that a Works Committee was more than a piece of machinery, and something different from the old methods of industrial conciliation. It means that a Works Committee is felt to be something vital and something new, something which enlists the workers in real participation, and something that offers fresh promise for the future."

It is, however, idle to deny that Works Committees raise questions closely affecting the vital interests of both employers and trade unions, and for that reason their formation presents considerable difficulties. It is therefore only after the formation of the National Council that the problem can be tackled with a prospect of evolving principles which will be acceptable to all parties concerned. Much will depend, however, on their success in dealing with it during the coming year.

As has already been said, by the end of 1918 15 Joint Industrial Councils had held at least their first meeting. It is, of course, too early to form any judgment as to their ultimate possibilities, but enough has been seen of their work to show that they are great. The Pottery Council, which was the first to be set up, has been in existence for a year. A large part of its time was necessarily devoted to getting the machine in order, but Committees are already making preliminary enquiries in regard to rates of wages and standardising methods of arriving at the average cost of production. The Council acted regularly on behalf of the industry in its negotiations with the Ministry of National Service, the Coal Controller and other Government Departments. The other Councils were also largely engaged

in dealing with the question of District Councils and the formation of the various committees necessary to transact their business, but some of them found time to deal with important general questions. The Baking Council, for instance, at its first meeting fixed a minimum rate of 60s. for urban and 55s. for rural areas and discussed the question of a 48-hour week after the War. Various Councils set up Education Committees to offer assistance to the Board of Education in framing syllabuses for the Continuation Schools under the new Education Act. The Furniture Council and the Gold, Silver, &c. Council took steps to mediate in disputes which were reported to them arising in their trades. Other questions which were frankly and earnestly discussed on various Councils have been the alleged restriction of output by trade union regulations, the non-observance of trade union rates by employers represented on the Council, and the proposals that foremen should in certain instances be approved by the men in the shop, and that workmen should have the right of appeal to a Joint Committee in case of threatened dismissal. It is characteristic of the new spirit which animates these Councils that questions like these, which in former times would probably have been discussed with acrimony and without hope of reaching any solution, were not only treated in a practical and reasonable spirit by both sides, but led to the unanimous adoption of active measures.

In his circular letter to the Employers' Associations and Trade Unions the Minister of Labour stated on behalf of the Government that the Councils would be asked to take over a large amount of advisory work in connection with the problems of the War and the transition to peace, and that they would be recognised as the Official Standing Consultative Committees to the Government on all questions regarding their respective industries. In pursuance of this policy the Ministry of Labour and the Ministry of Reconstruction consulted the Joint Industrial Councils already formed on various problems relating to the transition period which would immediately follow the cessation of hostilities, asking them to collect information as to the prospects of employment in their industries immediately after the War, and to consider what arrangements would be necessary in regard to the displacement of substitutes and the reinstatement of sailors, soldiers and munition workers. The Joint Industrial Councils were also asked to make arrangements for the training of disabled men in those cases where such arrangements do not already exist, and steps were taken to explain to them the Government scheme for post-war priority and the rationing of raw materials. They were invited to assist the Government in discharging the onerous task connected with the allocation and supplies of raw material after the War as long as any serious shortage continues to exist.

Looking back over the year, it cannot be doubted that the calling of the preliminary conferences and the work of framing

constitutions for Industrial Councils have been of great value, even apart from the actual work which the Councils have already performed. When the Whitley Report was published, there were innumerable separate trades in the country but few industries, and of the latter, few had any organic life of their own. The result of the Whitley Scheme has been to stimulate organisation not only on the part of the various Employers' Associations and Trade Unions, but also in the direction of grouping them on industrial lines. In a number of cases, groups of trades were formed into industries with a real identity, and both on the side of Employers and Trade Unions, many bodies which hitherto either had no contact with each other or were in violent antagonism, have for the first time been brought together in a friendly spirit. This result is particularly noticeable in connection with the reconciliation of Craft Unions and General Workers' Unions. Not a few of the amalgamations which were so marked a feature in the Trade Union world during the past year were due at least indirectly to the conferences summoned in connection with the Whitley Report. Moreover, as the scheme postulates a good state of organisation both among employers and workers, its adoption greatly stimulated recruiting among both Employers' Associations and Trade Unions. This in itself is a guarantee that industrial troubles will be more easy of conciliation in the future than they have been in the past, since they were frequently caused by the failure of non-federated firms to accept the general standard adopted by employers in an industry, or by the failure of trade unions to carry out agreements through imperfect organisation. But over and above these results the most valuable effect of the formation of Industrial Councils lies in the better spirit which they are already promoting in industry. Much remains to be done before the machinery proposed by the Whitley Report is completed and perfected, and it must always be remembered that the scheme itself is nothing more than a piece of machinery. It is on the results which that machinery produces, not on its mere creation, that the success of the scheme must be judged, but sufficient progress has already been made to give good ground for hope that the creation of Industrial Councils will ultimately produce a peaceful revolution in industry which will place it on a better and surer foundation.

In the course of the year the Whitley Committee produced a second Report dealing with less organised industries. This Report recommended that industries should be classified in three groups: Group A—those that were highly organised; Group B—those that were less organised; Group C—those in which the state of organisation was so imperfect that no Associations of Employers or Workers could be said adequately to represent those engaged in the industry. While Joint Industrial Councils should be formed for Group A, the Committee suggested that these Councils should be modified for industries in Group B by the attachment of one or two representatives of the Ministry of

Labour to act in an advisory capacity, while for Group C Trade Boards should be established under the Trade Boards Act, 1909. This Report was carefully considered by the Ministers of Reconstruction and Labour, who considered that it would not be practicable to distinguish between Groups A and B, and that it was in any case not desirable to add official representatives to Joint Industrial Councils, since the primary idea of their formation was that they should be independent bodies. The two Ministers also expressed their doubts in a memorandum which was published as to the advisability of adopting the further recommendation of the Committee that Trade Boards should be established in connection with Industrial Councils to deal with unorganised areas or branches of an industry, and that Trade Boards should be invited to formulate schemes for Industrial Councils. At the same time the Minister of Reconstruction felt the need of some interim body in industries which were not sufficiently organised for the creation of an Industrial Council which he might consult on the various problems relating to the transition period. He therefore took steps to form Interim Industrial Reconstruction Committees, consisting of an equal number of employers and representatives of workpeople's Associations, to advise him on these questions. Among other things these Committees have been engaged on improving the organisation of their respective industries; and in some cases have already taken steps towards forming an Industrial Council when the organisation has reached a sufficiently advanced point.

### **Trade Boards.**

Even when this work has been done, however, there still remain a considerable number of ill-organised and ill-paid industries for which no provision has been made. The experience gained from the working of the Trade Boards Act, 1909, has clearly shown that the establishment of Trade Boards resulted in the raising of the level of wages in badly paid industries without affecting their general prospects and prosperity. The Government therefore decided to extend the Act, in order to give the Trade Boards themselves greater powers and freedom of action, and to enable the Government to establish Trade Boards more rapidly, in order that industries in which wages were found to be at a low level or to be deteriorating rapidly could be dealt with promptly by the creation of a Board. With these objects in view the Minister of Labour introduced a Bill in May last, and on August 8th it received the Royal Assent. The rapid passage of a Bill of this character through both Houses of Parliament was a remarkable tribute to the determination of all parties to remove the social evils which have been a blot on our industrial system. The principal features of the 1918 Act are that the Minister of Labour has power to establish a Trade Board by making a Special Order without the necessity of going through the difficult procedure involved in the passage of a Provisional Order Bill through

Parliament, subject to the holding of an enquiry by some independent person should substantial objections be made to the proposed Order, and that the Boards are given much more elastic powers in regard to the fixing of minimum rates, while the time within which a rate can be fixed and brought into operation has been reduced from 9 months to 3. Among other things, Boards are now able to fix special rates for overtime, and to lay down what shall be the recognised working week for the Trade. The Act further provides that the employer shall pay his workers for the whole time during which they are on his premises, unless he can prove that they were there without his consent, or for some purpose unconnected with their work and other than that of waiting for work. The Boards are further invited to consider other matters affecting their industries, and Government Departments will be bound to pay attention to any suggestions they may make. In this connection it may be mentioned that several of the existing Boards were consulted on resettlement and conditions after the War. Although this Act is only an extension of previous legislation, the alterations which it embodies give the Trade Boards a new status, and the Government a new weapon with which to deal with the problem of depressed wages and conditions.

During the year the Ministry of Labour was engaged in making enquiries as to wages and conditions in 26 of the less organised trades and proceeded to set up Trade Boards in those cases where they appeared to be required. The Act came into force on October 1st. Draft Orders were issued for the establishment of 3 Boards, and a number of other Orders will be issued in the near future. With their extended powers the Trade Boards will be able to make systematic and comprehensive arrangements with a view to providing a proper level of wages in their industries, and upon them will largely rest the responsibility of maintaining such a level during the period following the war, which is bound to bring about a general revision of wages, when the stabilization of prices renders it once more possible to fix more or less permanent wage standards. Owing to the urgent call for workers in munitions industries a large number of those previously employed in poorly paid trades have migrated, and have been earning much higher wages than they had previously been able to obtain. When war contracts come to an end there will naturally be a large number of workers who will return to their old industries, and one of the principal objects for which Trade Boards are being established is to prevent this inflow depressing the standard of remuneration below a reasonable level. The new Trade Boards Act may, therefore, be regarded as an important step in preparation for reconstruction, both as affording a guarantee against bad conditions in the less prosperous industries and as extending the sphere of industrial organisation and regulation, without which no solid and permanent advance in the direction of improving the conditions of industrial life can be achieved.

The result of the work that was done during the past year in the field of industrial reconstruction may perhaps be summed up by saying that it aimed at creating really adequate machinery for dealing with the social and economic problems of which everyone has become more acutely conscious during the War, and which everyone feels must be satisfactorily solved if the well-being and prosperity of the community at large are to be ensured. The above record will shew that considerable progress has already been made in the direction of organisation. It will be for future years to reap the fruits which it may be expected to produce in due time. At the same time it must be remembered that the machinery is new and has yet to prove itself. Every industry will be faced by problems of immense difficulty during the transition from war to peace conditions. It would be unduly optimistic to assume that Joint Industrial Councils and Trade Boards will in every case prove capable of solving these problems unaided, but the task will be rendered much easier by the existence of such representative joint bodies in industries.

### **Agricultural Wages Boards.**

In connection with the foregoing considerations, special reference must be made to the development which took place during 1918 in the work of the Agricultural Wages Boards set up in England and Wales, Scotland and Ireland. The establishment of these Boards was briefly noted in the War Cabinet Report for 1917.

The Agricultural Wages Board for England and Wales was appointed on the 3rd December, 1917. The main object for which the Wages Board is established is the fixing of minimum rates of wages for all classes of workers employed in agriculture, which term includes work not only on farms, but also on osier land, woodland, orchards, market gardens and nursery grounds.

The first business of the Wages Board was to establish for all parts of England and Wales District Wages Committees, with whom rests, under the Act, the duty of making recommendations to the Board as to the minimum rates applicable in their areas. This involved the grouping of the counties of England and Wales into 39 districts, the determining of the number of members required in each case and the selection of an equal number of representatives of Employers and Workers, who together constituted  $\frac{3}{4}$  or more of each Committee. Three District Committees were constituted in January and the others at intervals up to the beginning of May, when the last Committee was set up.

The District Committees set to work promptly to frame their recommendations in regard to the minimum rates for their areas, and the main business of the Board, after setting up the District Committees, was the consideration of these recommendations,

the issue of Proposals, the examination of the objections which were made to the Proposals, and the final fixing of rates by Orders. The District Committees and the Board proceeded on the basis of dealing first with minimum rates for adult male workers, and before the end of the year minimum rates for such workers had been fixed and were legally enforceable for the whole of England and Wales. The rates for ordinary adult male workers which were fixed were weekly rates based on a specified number of hours worked each week, with overtime rates to apply to all Sunday work, and to all work on weekdays in excess of the number of hours in a week which constitute the basis for the weekly wage.

The Board at an early stage adopted the age of 18 as that at which the minimum rates for men should become payable for the country generally. The weekly rates fixed to apply at 18 years varied for the different counties from 30s. to 36s., and the hours to which the weekly rates applied range from 54 in the eight summer months from March to October inclusive, and 48 in the four remaining months, to 60 hours all the year round. The rate of 30s. for 54 hours in summer and 48 hours in winter at the age of 18 applied in the case of 27 counties. The highest weekly wage applicable at 18 was 36s. for 60 hours all the year round in Cheshire. In the case of 15 counties, a differentiation was made in the rates between the ages of 18 and 21. The highest weekly wages fixed for ordinary male workers were 36s. 6d. for a week of 57 hours in summer and 49½ hours in winter applicable at 21 years of age and over in Glamorgan and Monmouth, and 36s. for a week of 54 hours in summer and 48 hours in winter applicable at 19 years of age and over in Northumberland and Durham. Overtime rates were calculated on the general basis of time and a quarter on weekdays and time and a half on Sundays.

In the case of a large number of counties, the District Committees during the year made recommendations, adopted by the Wages Board, for fixing special minimum rates for special classes of male workers (such as Horsemen, Stockmen and Shepherds), entrusted with the care of animals, who necessarily have longer and more uncertain hours than the ordinary farm labourer. These special rates, in most cases, were weekly rates applicable to a 7-day week consisting of the hours of employment which have been "customary" in the case of these classes of workers, with overtime rates to apply if at any time the men are called upon to work longer than was the custom. In a few cases a maximum limit has been set to the "customary" hours, over and above which overtime rates come into operation. In the case of certain counties, the District Committees did not recommend special rates for these special classes of workers, but preferred that they should be paid at the minimum and overtime rates fixed for ordinary workers in their areas.

As the work progressed it was found possible to deal with rates for boys at the same time as those for men, and minimum and



overtime rates were fixed for boys for the whole country, with the exception of two Welsh counties, in regard to which the rates were still under consideration. The minimum rates for boys were on scales ranging from a uniform figure (with two exceptions) of 10s. a week for lads of under 14 by equal annual increments up to the full minimum for men. The overtime rates for boys, like those for men, are based on rates approximately equivalent to payment at time and a quarter on weekdays, and time and a half on Sundays. In order to provide for the case of inexperience, a reduction of 20 per cent. was allowed on the rates for all male workers under 18 during the first two months of their employment in agriculture. The Board gave a good deal of consideration to the question of rates for women and girls, and made Orders fixing minimum and overtime rates for female workers for the whole of England and Wales.

Apart from the actual fixing of rates, the Board gave prolonged consideration to the subject described in the Corn Production Act as "benefits and advantages," in other words perquisites, and allowances in kind. The position taken in regard to this subject was that, while the tendency should be in the direction of a fixed cash wage without any supplement in kind, this ideal could not be reached at once because neither employers nor workers as a body were prepared for so sudden a change. The Board, therefore, had to decide what allowances or privileges might continue to be reckoned as part payment of wages in lieu of payment of cash, and also the way in which their value should be ascertained for this purpose. The Order which they issued on this subject limited such "benefits and advantages" to the provision by an employer to a worker, of a cottage, board and lodging, and milk and potatoes. The Board decided that in so far as they had any power in the matter, they would, after the war, endeavour to place cottages provided by employers to agricultural workers on a basis of an "economic rent." In view, however, of the existence of legislation preventing or restricting the raising of rents during the war, the Board have not felt able to adopt this standard at present, and the 3s. a week, which is the maximum value placed in their Order on the occupation of a cottage, therefore represents a compromise.

As soon as minimum rates have been fixed for any area, the question arises of the position of the workers who, owing to infirmity or physical injury, are unable to earn the minimum rate. Under the Act, there is power to grant permits of exemption to such workers, and this power has been delegated in all cases to the District Wages Committees, subject to revision of their decisions by the Wages Board. For the purpose of dealing with applications for Permits locally, the District Wages Committees were empowered to set up Sub-Committees for the various parts of their area. The District Committees have also certain duties in connection with determining the value to be placed in

their areas on the allowances which are recognised by the Board for the purpose of part payment of wages in lieu of payment in cash, and the Board delegated to the District Committees the power of dealing, under the Act, with cases in which workers are employed on piecework, but in which no minimum piece-rates have been fixed. In all these ways the District Committees are, and are likely for a considerable time to be, fully occupied.

A good deal of work has been done by the Board which does not yet appear in the form of Orders or even of Proposals. The question of specific rates for harvest work engaged the attention of the Board and District Wages Committees, although it was found impracticable to fix such rates in time to take effect for the harvest of 1918. Much of the detailed work of the Board, apart from the actual fixing of minimum rates, was carried on by means of Committees set up from time to time to examine and report upon particular problems with which the Board were faced. In this connection mention may be made of a Committee consisting not only of members of the Board, but also of certain co-opted members, to enquire into the economic data upon which the rates of wages ultimately depend, the farmer's income and expenditure, and the cost of living in rural districts. At the end of the year the Committee were considering their Report, which was issued early in 1919. All Committees are constituted, like the Board itself, on the basis of an equal number of employers and workers.

A comprehensive enquiry into the wages and conditions of agricultural workers throughout England and Wales was instituted by the Board of Agriculture at the beginning of 1918 and has now been completed, and the reports of the Investigators for a considerable number of counties have already been presented to the members of the Wages Board. The final report embracing the reports of the individual Investigators and a general report by the Director will, it is expected, be ready for publication early in 1919.

The task which immediately arose after minimum rates of wages had been fixed, was to secure their enforcement. This work was placed by the Board of Agriculture in the hands of the Wages Board, and three Inspectors have been fully at work investigating complaints and dealing generally with cases of non-payment which come to the Board's notice. The Board appointed a standing Administrative Committee to exercise general supervision over this branch of the work.

*Scotland* was divided into twelve Wages Districts, for each of which a District Wages Committee, comprising a Chairman and representatives of employers of agricultural labour and of workmen employed in agriculture in equal numbers has been recognised and certified by the Board. For the purpose of constituting a Central Agricultural Wages Committee for

Scotland, these twelve districts were combined so as to form five combination districts, from each of which two representatives of the District Wages Committees within the combination were elected to serve on the Central Committee, one representative of the employers and the other of the workmen members; in addition, the Board appointed two women members. These twelve members, with Sir James Wilson, K.C.S.I., as Chairman, compose the Central Committee for Scotland.

Considerable delay took place in the election of members of these Committees owing to the want of organisation among the employers and still more among the workmen, and it was not until May, 1918, that the elections were all completed and the Committees finally constituted.

Under the Regulations issued by the Board, most of the powers which are conferred by the Act on the Agricultural Wages Board have been left to the District Committees, with whom more especially rests the initiative in fixing minimum rates of wages. By the end of 1918 almost all the District Committees had fixed the minimum rates for men, boys, women and girls which they were required by the Act to fix, and several of them had taken advantage of the optional power they possessed under the Act to fix minimum rates for special classes, such as ploughmen, cattlemen, shepherds and byrewomen. The Second Schedule required every decision of a District Wages Committee in Scotland fixing a minimum rate of wages to be reported to the Central Committee, which may disallow a rate within a period prescribed by the Board, and if the Central Committee do not exercise this power of disallowing, the rate fixed by the District Committee is to be deemed to be the minimum rate fixed under the Act.

The Board receive copies of the Minutes of all meetings of the Committees, including those of the Central Committee, and in this way keep in touch with all sides of the work.

So far the most important rates finally passed by the Central Committee are the following :—In the Border Counties, 40s. for a shepherd over 18 in charge of a flock of sheep; 35s. for a skilled cattleman, ploughman or orraman over 18; and 30s. for other male workers over 18. In Dumfries and Galloway, 38s. for a ploughman over 18; 33s. for an ordinary male worker over 18. These rates are to be calculated on the hours customary in the district.

The following rates were disallowed by the Central Committee—in Forfar and Perth, 35s. for male workers over 18, to be calculated on 54 hours in summer and 48 hours in winter, exclusive of meal times and time required for stable work.

In the North-Eastern Counties, 33s. for male workers over 18.

Under the Regulations issued by the Board, when a decision

is disallowed it is referred back to the District Committee for reconsideration, and in the event of their new decision being again disallowed by the Central Committee the Board will refer the question of fixing the minimum rate to the Central Committee.

It is expected that in almost all cases final orders will have been passed as regards the minimum rates fixed by District Committees by the 23rd January, the date up to which District Committees have the power to fix the minimum rates. After that date, the question of fixing any minimum rate which a District Committee may have failed to fix will be referred by the Board to the Central Committee.

The Agricultural Wages Board for Ireland consists of 16 members, including the Chairman. All the members were appointed by the Department of Agriculture and Technical Instruction for Ireland, 6 being representative of employers, 6 of workmen, while 4 are Appointed Members. The Board, having decided to set up no District Committees, proceeded with the work of dividing the country into Groups of Areas, and of dealing with the question of minimum rates for these various groups. On 10th November, 1917, they issued an Order fixing minimum rates for male agricultural workers over 21 years of age and female workers over 18. In the beginning of 1918 a further Order was issued dealing with rates of wages for male workers under 21, which, on 27th February, was followed by an Order defining the benefits or advantages, not being benefits or advantages prohibited by Law, and their maximum weekly values, which might be reckoned as payment of wages in lieu of payment in cash under the Corn Production Act, 1917. All these Orders remained in force until 9th November, 1918.

After that date the Agricultural Wages Board reconsidered the various Orders and published, on 19th December, 1918, one comprehensive Order, to take effect as from the 4th January, 1919. This Order dealt with all classes of agricultural workers (males over 16 and women over 18 years of age); it defined and valued also the benefits and advantages which might be counted in lieu of payment in cash, and fixed the Groups of Areas. Minimum rates of pay were fixed both for a 60-hour week of six days of 10 hours, and for a 54-hour week of six days of 9 hours, exclusive of meal times. Certain conditions relating to overtime pay, etc., were made, and weekly minimum rates, inclusive of Sunday work, for ploughmen, cattlemen, yardmen, male milkers, and for certain classes of herds, were laid down.

The minimum rate of pay for a 60-hour week varied from 28*s.* 6*d.* for male workers over 20 years of age to 17*s.* 6*d.* for male workers aged 16 to 18, while the highest minimum rate to cover Sunday and other work is 31*s.* 6*d.*

### Industrial Disputes.

During the period of the War there has been a very considerable and continuous increase in the work of the Chief Industrial Commissioner's Department of the Ministry of Labour. The following statistics of the number of cases settled by arbitration or formal conciliation conference illustrate this increase :—

1914, 88; 1915, 319; 1916, 1,274; 1917, 2,414; 1918,

In connection with the arbitration work of the Department, attention should be called to an important development which took place in the early part of 1917. Prior to that date the practice had been that differences were reported to the Department from time to time and district by district and, after the necessary procedure had been complied with, were referred to the Committee on Production for determination. In February, 1917, an agreement was negotiated by the Chief Industrial Commissioner between the Engineering Employers' Federation and a number of Trade Unions having members employed in federated shops and foundries (at the end of 1918 about 50 unions were signatories to the agreement), which provided for a periodic reference every four months to the Committee on Production, who should decide what general alteration, if any, should be made in wages.

The agreement had considerable success and similar agreements have since been adopted for many other industries, *e.g.*, the Chemical Trades, Druggists and Fine Chemical Trades, Soap and Candle Trades, Building Trades, first in Scotland and afterwards in England and Wales; and Ship Repairing Trades (Mersey District). In addition the principle of a four monthly hearing by the Committee on Production (apart from the other clauses of the agreement) was adopted by Dockers, Leather Trades, Clay Industry, &c. The Trades covered by these arrangements are of such importance that they exercise a predominant influence on wages, and other trades not having agreements of necessity follow them, for example, the Ship-building Trades.

The efforts of the Ministry of Labour were directed largely to the necessity of securing co-ordination between the various Government Departments responsible for labour. This was particularly necessary in the Building Trade, where the insufficient supply of labour relative to the demand and the competition of the Government Departments had produced a state of affairs detrimental to all the parties concerned and to the interests of the country. During 1918 important steps were taken to deal with the Building Trade question :—(1) The Building Labour Committee representative of the Government Departments were reorganised under the chairmanship of the Chief Industrial Commissioner and an Executive Committee formed under the same Chairman with one officer from each of the principal Government Departments concerned. (2)

In June a Statutory Rules and Order No. 742 was issued, which requires that time rates of wages of employees in the Building Trade cannot be altered except by consent of the Government authority or by Arbitration. (3) As indicated above, agreements have now been made for the building trades of the whole of Great Britain providing for periodic general wage hearings before the Committee on Production every four months.

The number of trade disputes in 1918 involving cessation of work was 1,252 as compared with 688 in 1917, an increase of 82 per cent., but the number of workpeople involved was 1,096,828 as compared with 860,727, an increase of only 27 per cent. The majority of the disputes were of comparatively small importance; of the principal ones the following may be specially mentioned :—

1. In July, about 35,000 skilled workers in the Engineering trade at Coventry, Rugby, Birmingham, Leicester and Newcastle-on-Tyne took objection to the Government "embargo" on the transfer of skilled labour to firms considered to be already sufficiently provided with such labour. A Committee of Inquiry was appointed and work was resumed after an interval of six days. The Committee reported in September that the embargo system was necessary in the national interests, that the trouble was largely (though not wholly) due to the system not having been understood by the operatives, and that measures should be adopted to bring the reasons for the adoption by the Government of any such measures immediately and effectively to the notice of employers and workers concerned.

2. In May, 40,000 colliery workpeople in Monmouthshire and Glamorganshire ceased work for 19 days in an endeavour to secure recognition of workmen's local "combine" committees, in connection with a dispute at Tredegar. The management agreed to meet the miners' agent and any persons employed at certain collieries that the agent might deem necessary, for the full discussion of disputes.

3. In connection with a claim for a further war bonus to railway servants, a stoppage took place in September on the part of locomotive drivers, firemen and other railway workers in South Wales and London, and one or two other places, the number out being about 25,000. An advance of 5s. per week had been granted. This advance made the total war increase 30s. per week. After a stoppage of a few days, work was resumed unconditionally.

4. The question of payment of men's wages to women performing men's work was raised in August, when 11,000 omnibus and tramway workers in London ceased work for 6 days. The principle was not conceded, but as a result of an award by the Committee on Production an advance of 5s. per week was granted and

it was suggested that the 5s. advance to women might be viewed as containing an element of compensation for their exclusion from the 12½ per cent. bonus granted to men.

A War Cabinet Committee was appointed as the outcome of this strike, to consider and report on the question of the wages of women generally to those of men, having regard to the interests of both and to the value of their work.

5. In August a number of Yorkshire coalminers, estimated at 150,000, ceased work for 2 days, in connection with a dispute as to the hours worked by surfacemen. The matter was settled in December by the National Settlement establishing a week of 49 hours, which involved a considerable reduction in the surface-men's hours.

6. In September the cotton spinners of Lancashire and Cheshire endeavoured to secure unemployment pay for time lost through reduction in working hours under the regulations of the Cotton Control Board. About 100,000 workers were affected directly or indirectly and work was suspended for 6 days. An independent tribunal was appointed by the Government to enquire into the case, and in October it decided that the "rota" system, by which all operatives took their turn of unemployment, could not be restored, and that reduction of working hours was a necessity. The men's claim for pay for unemployment was declared to be untenable under the terms of the Agreement in force, but it was suggested that both parties should agree to reconsider the Agreement with a view to a variation of its terms regarding wages at an earlier date than that fixed for its natural expiry.

7. In December the Lancashire spinners, piecers and card-room workers, to the number of about 100,000 (apart from weavers), ceased work in support of a claim for an advance of 40 per cent. on current wages. The dispute was settled by granting an advance of 50 per cent. on standard piece-price list wages, and work was resumed after nine days.

### **Armistice Changes.**

The cessation of hostilities in November involved very important changes in Labour matters, for the correct appreciation of which a brief reference to the early period of the War is necessary. The Unions had, in 1915, agreed to the suspension of many of their customs and practices, and the Government of the day had guaranteed the ultimate restoration of the suspended rights.

The general form of the guarantee was as follows:—"Any departure during the War from the practice ruling in the work-shops, shipyards and other industries prior to the War shall only be for the period of the War. No change in practice made during the War shall be allowed to prejudice the position of the workmen in the owner's employment, or of their Trade Unions in regard to the resumption or maintenance after the War of any rules or customs existing prior to the War."

By the Munitions of War Acts of 1915 to 1917, power was given to the Board of Trade to refer to arbitration differences regarding wages, hours of work and conditions of employment in connection with munitions work, if other means of arriving at a settlement had failed, and the Act of 1915 prohibited strikes or lock-outs in the case of munitions work. The Acts applied only to "munitions work"; the Trade Unions, however, agreed to certain non-munitions trades to suspend their normal practices in regard to establishments not covered by the Acts, and the same pledge was given as regards restoration of privileges. The administration of the arbitration provisions of the Munitions Acts was transferred to the Ministry of Labour on its creation in 1916.

With the signing of the Armistice with Germany a new situation had to be faced. It was essential that the process of transferring workers from munition work to civil work should be begun immediately, and as the provisions of the Munitions of War Acts ceased to be effective when munitions work ceased, the awards in regard to wages given under those Acts were of no effect and the standards of wages created by the awards (which were based mainly upon the increase in the cost of living) had no statutory foundation.

It was desirable, therefore, to clarify the situation caused by war "dilution" of labour, to encourage the reversion by employers and employed to the normal methods of adjusting matters affecting their several industries, and to safeguard against a sudden drop in wages without a corresponding fall in the cost of living, which probably would not follow the immediate cessation of hostilities. For these purposes a conference of representatives of Employers' Associations and Trade Unions was convened on the 13th November at Caxton Hall, in order that the policy of the Government in the altered circumstances due to the Armistice might be explained, and was addressed by the Prime Minister, the Minister of Labour, and other members of the Government. The employers and trade unions appointed committees to assist and advise the Government in regard to the necessary legislation for the stabilisation of wages and for the restoration of the pre-war practices in accordance with the pledge given on the matter in 1915. At the close of 1918 the Bill dealing with the restoration of pre-war practices was in the course of preparation in consultation with the Employers' and Trade Union Committees, and an Act was passed in November, 1918, called the Wages (Temporary Regulation) Act, 1918, to deal with the Wages question.

### **Wages Act.**

By the Wages Act compulsory arbitration was abolished (except on the question as to what is the "prescribed rate" under the Act or as to whether such rate should be raised or lowered) and the right to lock-out or strike was restored. The operation of the Act was limited to six months, a period which it is hoped would suffice



to enable employers and employed in the various trades to arrange for themselves by general agreements what should be the future basis for regulating wages, *e.g.*, by means of Conciliation Boards or Joint Industrial Councils, and to enable the establishment of Trade Boards for the badly organised trades to be completed.

War advances to meet the increased cost of living had been obtained by practically all trades, and by October, 1918, the Committee on Production had given advances amounting to 23s. 6d. per week over and above pre-war rates plus the bonus of 12½ per cent. on earnings given as a result of Orders made by the Minister of Munitions. At the four-monthly revision of rates in November a further advance of 5s. per week (or its equivalent) was obtained by the large industries, including engineering, shipbuilding and repairing, iron and steel, building, chemical trades, and others.

The Wages Act safeguarded the advances gained by the various trades by enacting that for a period of six months, the minimum wages generally applicable at the date of the signing of the Armistice in each trade or district to any class of workmen should be maintained unless altered by agreement or by arbitration.

The Act applied to men, boys, women and girls. The changes that had taken place during the war had covered practically all workpeople concerned, whether employed on munitions work or not, but in the case of women the changes had not covered the whole of a trade or industry to the same extent as in the case of men. The Act recognised this position, and provided that the wages paid to the majority of women and girls employed in a trade in consequence of an Order under the Munitions of War Acts or an Award or an Agreement during the war period, should be maintained as the standard for that trade. In other cases the wages actually paid to the majority of the women and girls became the standard rate, and where that rate was found to be unduly low the Minister of Labour was given power to make Orders regulating the rate. Machinery had to be created for carrying out these changes, and for this purpose an Interim Court of Arbitration, containing representatives of employers and workmen, was established. This Court, in effect, took over the work hitherto done by the Committee on Production and by the Special Arbitration Tribunals.

A new Department entitled the Wages and Arbitration Department was also created in the Ministry of Labour in November, 1918, to administer the Wages Act and the Conciliation Act, 1896, the functions of the Chief Industrial Commissioner's Department being linked up with this Department.

## CHAPTER XI.

**TRANSPORT.**

There was no part of the nation's war effort to which the Government on its formation in December, 1916, gave more elaborate and concentrated attention than to overseas and inland transport. During 1917 the whole British mercantile shipping was brought into Government service. Railway conveyance—passenger and goods—was re-organised; canals were taken over and developed; dock facilities were improved and extended, and such exceptional attention was devoted to shipbuilding that the production from British yards of cargo-carrying steamers was raised to more than double that of the previous year.

Throughout 1918 these efforts were continued. The concentration of our merchant fleets on the shortest sea routes enabled us to import almost as great a tonnage as in 1917, in addition to conveying hundreds of thousands of American soldiers across the Atlantic. Our shipbuilding yards launched and completed new ships with a gross register of 1,534,110 tons, as compared with 541,552 in 1916 and 1,163,474 in 1917. Our railways, with reduced personnel and equipment, dealt with a greater passenger and goods traffic than in any previous period.

It can be claimed that the policies adopted in the several divisions of transport, and the energies devoted by every section of management and worker to carrying them out, not only met every essential need in a year when needs were month by month expanding, but were a leading factor in rendering easier the food position of our own people and of our Allies, of increasing the supply of munitions to our armies, and of transporting from America to the battlefields of Europe those great armies of the United States which did so much to bring the war to its victorious end.

**A. Shipping.**

The chief characteristic of the year 1917 in relation to British merchant shipping had been the gradual development and expansion of State control and direction, so that by centralisation of control British merchant tonnage could be utilised in the manner most conducive to the successful prosecution of the war. This end had been accomplished by bringing under requisition or direct control all the tonnage which previously had been trading in a free market, and by extending so far as practicable the principle of drawing supplies from the nearest source of origin. The extent to which this policy had been successful may be gathered from the fact that whereas the average amount of British tonnage available for imports into the United Kingdom was approximately 7,500,000 tons gross, the amount of imports into the United Kingdom during 1917 in British vessels was 31,000,000 tons. These figures should be compared with the corresponding figures

for the year 1913, when the total amount of British tonnage available for imports had been approximately 12,000,000 tons and the imports in British vessels 35,000,000 tons.

During the year 1918 the outstanding characteristics of the administration of the Ministry of Shipping have been greater economy in the working of tonnage, and, as an important factor in this, the development of the principle of Inter-Allied co-operation.

From the beginning of the war all the Allies looked to British shipping to supplement their own in supplying their Armies and maintaining their peoples, and the force of the claims put forward from time to time by the different Allies had been recognised by Great Britain. The Shipping Control Committee, established under the Chairmanship of Lord Curzon in January, 1916, represented a first attempt to balance the demands of the Allies against the claims of Great Britain herself. The system was, however, unsatisfactory, as the entire responsibility for dealing with a request from an Ally for tonnage fell upon the shoulders of the British Government, who did not possess the evidence necessary to judge fairly whether in the best interest of all the Allies the request should be admitted or refused. It was open to the further objection that in practice it meant that the British authorities gave up control over the tonnage which they assigned to the service of the Ally, and thus any grant of tonnage assistance to an Ally reacted unfavourably on the efforts which were being made at the same time to secure greater efficiency in the working of tonnage by the concentration of control in one authority.

It soon became evident that it would be necessary both to abandon the wasteful system of dividing up the tonnage resources of the Allies into more or less distinct groups controlled independently by the different Governments, and also to establish some method which would enable a more accurate and scientific estimate to be formed of the relative needs of the different Allies in the matter of tonnage. The methods adopted by the Wheat Executive in regard to cereals indicated the way in which both these problems could be solved, and the first important step in the desired direction was taken when the Allied Governments decided that the cereal needs of all the Allies should have priority both in tonnage and finance over all other supply services. By accepting this decision Great Britain voluntarily assumed responsibility for contributing tonnage on a large scale to the cereal supply services of France, Italy and Belgium. The decision, furthermore, marked a new departure in that Great Britain undertook not to place so much tonnage at the service of the Allies, but to carry a certain proportion of the imports into these countries.

The entry of America into the war, and the surplus merchant tonnage which it was anticipated she would be able to contribute to the needs of the European Allies, coupled with the vast potentialities of her shipbuilding output, very materially changed *primâ*

*facie* the tonnage situation as between the Allies; for whereas with the comparatively unimportant exception of Greece, Great Britain had previously been the only Allied country whose tonnage exceeded that required for her own urgent needs, the entry of America gave reason to expect that there would be two of the Associated Governments in a position to grant assistance in tonnage matters to their less fortunate Allies. The result of this fundamental change in outlook, coupled with the tendency above indicated, led to the establishment of the Allied Maritime Transport Council by resolution of the Paris Conference in December, 1917. The Council was to watch over the general conduct of Allied transport and, while leaving each nation responsible for the management and supervision of the tonnage under its own control, was to secure the necessary exchange of information and co-ordination of policy and effort on the part of the four Governments of France, Italy, the United States of America and Great Britain, in adjusting their programmes of imports to the carrying capacity of the available tonnage (having regard to Naval and Military requirements), and in making the most advantageous allocation and disposition of the tonnage under their control, in accordance with the urgency of war needs.

The Council consisted of two Ministers representing each Allied country. The United States Government did not at first formally join the Council, but was represented at its deliberations by two representatives. In the autumn, however, the U.S. Secretary of War, Hon. Newton D. Baker, attended a Session of the Council, and pledged the U.S. Government to the policy of the common use of shipping for the common needs, and thus virtually put the U.S. Government on the same basis as the other members of the Council. In connection with the Council, a permanent Executive was created to co-ordinate and examine the statements of tonnage available and imports needed by the different Allies, in order to enable the Council to determine the best allocation of the available tonnage in the general interest of the Allies as a whole. The Council was purely deliberative and advisory and had no executive powers, each Government being free to accept or reject its recommendations. Nevertheless, it represented a very important step in securing economy in the use of tonnage and the allocation of available tonnage in a way best calculated to promote the successful prosecution of the war.

In association with the Allied Maritime Transport Council, Inter-Allied bodies dealing with the purchase and distribution of the more important supplies were gradually established. These bodies were all linked up with the organisation of the Allied Maritime Transport Council in such a way that the relative demands of the different Allies for the particular commodity covered by the particular allied body were presented to the Allied Maritime Transport Council as an agreed document. By this means the Allied Maritime Transport Council was spared the consideration of the relative claims of, say, France and Great Britain for cereals, and only had to consider the relative claims of, say,

the allied food programme as against the allied munitions programme.

These bodies, in their relations to the Allied Maritime Transport Council, were known as "Programme Committees." In some cases arrangements were made for bodies already in existence (*e.g.*, the Wheat Executive) to fulfil the functions of Programme Committees. In others, new organisations were specially created at the instance of the Allied Maritime Transport Council.

The Executive of the Council developed into a large organisation in Lancaster House. The total staff working there prior to the Armistice numbered about 300.

Programme Committees were established to cover the whole range of imported commodities, separate Committees being formed for wool, cotton, hides and leather, tobacco, paper, timber, petroleum, flax and hemp and jute, and coal and coke. In addition, a Food Council was established co-ordinating the work of Executives or Committees for cereals, oil seeds, sugar and meats and fats, and a Munitions Council, with Sub-Committees, for nitrates, aircraft, chemicals, explosives, non-ferrous metals, mechanical transport and steel.

The first problem dealt with by the Council was that of Italian coal. In 1917 the Allies accepted no collective responsibility for Italian coal, and except for 50,000 tons a month, provided by Great Britain, Italy was responsible for arranging her own imports with her own vessels and such British vessels as she could charter. Submarine losses and a cereal crisis in Italy at the end of 1917, which caused the diversion of a considerable number of Italian colliers to the wheat service, resulted in a very serious coal crisis. The machinery of the Allied Maritime Transport Council was immediately brought into play and, as a result, it was decided that 600,000 tons of coal a month must be supplied to Italy as an absolute minimum. Arrangements were made to supply this partly by sea and partly by rail from France, British coal being supplied to France in compensation for French coal thus sent to Italy. In this way the Italian coal position, which was desperate in March, was put in a substantially more satisfactory condition.

The Allied Maritime Transport Council, as a result of the co-ordination of the requirements of both France and Italy in regard to munitions, food and raw materials, was also able to bring about a thoroughly satisfactory and intelligent allocation of tonnage resources. It accepted the direct responsibility for the provision of the necessary tonnage for the Belgian Relief Commission, which had previously been left to obtain the tonnage it required from Belgian ships, and by competing for neutral tonnage in the open market. It also provided a satisfactory method for dealing with the large block of neutral tonnage over which the different Allies obtained control by various means. These vessels were by common consent employed in carrying coal

for France and Italy and cereals for the Allies, the amount of tonnage involved being nearly 700,000 tons dead-weight.

While this development towards Allied co-operation was proceeding, attention was also paid to the possibility of a greater economy in the use of tonnage by means of a better management, closer supervision of the stores and bunkers, and better correlation with the convoy system. To this end, the Branch of the Ministry of Shipping which had been formed to manage the comparatively small amount of tonnage at the time owned by the Shipping Controller, was strengthened by the addition of a large number of experienced shipowners, and the whole of the ocean-going tramp tonnage under requisition to the Ministry of Shipping was divided up amongst these gentlemen, who acted, as it were, as managers of the ships and supervised all the small details which the practical man alone can deal with, details individually of small moment, but which, in the aggregate, very materially affect the quantity of work which can be got out of a ship in the course of a year. They also advised on the suitability of vessels for any particular service, and watched that there should be no delay in transferring from one service to another. This experiment proved an unqualified success.

Commercial advisers to the Transport Staff were also appointed during the year at the principal coal-exporting ports in the United Kingdom.

In the latter part of 1917 it was recognised that the shipping situation in the Mediterranean was very serious; submarine losses were high, and the time taken by a vessel on the Mediterranean round was so long that it was becoming almost impossible to carry on the trades at all. The first step taken to deal with this unsatisfactory situation was the appointment of two representatives of the Ministry of Shipping with commercial experience on the staff of the newly-appointed Commander-in-Chief of the Mediterranean Station. For the purpose of their enquiry, these two representatives went to Malta, and as the result of their reports the First Lord of the Admiralty proceeded to Malta in July, 1918, to look further into the matter. On his return it was decided to establish a completely centralised organisation to co-operate with the Naval authorities in working out their system of convoys from the commercial standpoint all through the Mediterranean, and in that connection, to appoint experienced shipowners as the representatives of the Ministry of Shipping at the various ports to assist in giving despatch to vessels and generally to look after them from a shipowners' point of view. This organisation was satisfactorily established and representatives of the Ministry of Shipping stationed at Malta, Rome, Geneva, Port Said, Alexandria, Gibraltar, Bizerta (for the North African coast), and Marseilles. The success of this policy is shown by the fact that, whereas the adoption of the convoy system in the Mediterranean in August, 1917, at once increased the length of time occupied on each passage, by May, 1918, the length of time taken on the voyage had been brought down practically to the same

time as it occupied prior to the convoy system. The added safety of the convoy system was thus obtained without any corresponding loss in carrying power.

A similar policy was adopted in regard to North French Ports, African Ports and India, experienced shipowners being stationed at Sierra Leone, Durban and Bombay for all Eastern ports.

Another step in the development of the principle of employing expert commercial knowledge in running ships on Government account was the preparation of an exhaustive list of competent agents in the various ports visited by ships on the service of the Ministry of Shipping. A copy of this list was handed to the Master of every requisitioned ship, so that when he arrived in any port he might know at once the name of the firm which was transacting the agency business on behalf of the Ministry of Shipping. The scheme possessed the additional advantages which the centralisation of work in a few first-class firms necessarily involves.

The policy carried out by the Ministry of Shipping during the first year of its existence of bringing all tonnage under requisition, coupled with the increased cost of stores and supplies and the rise of wages, produced during the past year a strong demand on the part of shipowners that the Blue Book Rates, which had been in operation practically unchanged since the beginning of the war, should be revised. The rates of hire for requisitioned vessels of the tramp class were, at the request of the Chamber of Shipping, investigated by two accountants appointed, one each by the Ministry of Shipping and the Chamber. As the result of this investigation an increase of rates ranging from 49 per cent. for the smallest vessel to 22 per cent. for the largest was conceded by the Government to take effect from the 1st March, 1918. The opportunity was taken to introduce a corresponding scale for vessels requisitioned on net charter, where the Government bears all risk and expense of the vessel, and for small craft under 301 tons gross register. In this connection it is interesting to note that the High Court ruled, in the case of the S.S. "Longbenton," that the owner of a vessel lost by war risk while under Government requisition was entitled only to the value of the vessel as a requisitioned vessel, and not to the value which she would have possessed had she not been requisitioned. In view of the very large expenditure incurred by the Ministry of Shipping by way of compensation for vessels lost by war risk, this decision was of considerable importance.

About the middle of 1918, mainly owing to the shipbuilding effort of the United States, the world's output of new tonnage equalled the rate of loss. But, although the position in respect of British shipping was rapidly growing better, the monthly loss still

exceeded replacements. The following summarises the progress of our merchant tonnage from the commencement of the war to the end of last October :—

**Progress of Steam Merchant Tonnage under the  
British Flag. 500 G.T. and over.**

	G.T.		G.T.
Tonnage, 31st July, 1914...	18,472,000	War Losses ... ..	7,594,000
New Building, U.K. ...	4,218,000	Marine Losses ... ..	1,143,000
New Building, Dominions and Overseas Purchases	738,000	Transfers to Admiralty and Foreign Flags and In- terned ... ..	1,206,000
Transfers from Foreign Flags and Prizes ...	1,626,000	Tonnage, 31st October, 1918	15,111,000
	<u>25,054,000</u>		<u>25,054,000</u>

(Figures in thousand gross tons.)

	GAINS.				LOSSES.				NET LOSS.
	New Building. U.K.	New Building, Dominions and Overseas Purchases.	Transfers from Foreign Flags and Prizes.	Total Gains.	War Losses.	Marine Losses.	Transfers to Admiralty and Foreign Flags and Interned.	Total Losses.	
Aug.-Dec., '14	660	110	766	1,536	236	121	508	865	671
Jan.-Dec., '15	640	138	127	905	836	217	365	1,418	513
Jan.-Dec., '16	540	66	57	663	1,213	226	139	1,578	915
Jan.-Dec., '17	1,094	207	300	1,601	3,639	324	116	4,079	2,478
Jan.-Oct., '18	1,284	217	376	1,877	1,670	255	78	2,003	126
Total ...	4,218	738	1,626	6,582	7,594	1,143	1,206	9,943	3,361

The new ships from the United States shipbuilding yards were all required to meet the growing demands of the United States Army, and considerable assistance had also to be given from British tonnage in the conveyance of both troops and stores. The tonnage position, therefore, of the European Allies became gradually worse during the year. Nevertheless, in spite of these serious additional calls on British tonnage, the Ministry of Shipping was able to import into the United Kingdom, excluding oil for the Navy, 31 million tons during the year, of which 13 million tons was foodstuffs and 15 million tons munitions (the word "munitions" covering commodities of such importance, from the point of view of the war services, that the supply was controlled by the Ministry of Munitions). The amount of tonnage available for this purpose was little more than 6½ million tons gross with some small help from foreign tonnage.

As has already been indicated, the military development during the course of the year threw a very considerable additional strain upon merchant tonnage.



The German offensive in March made it necessary to despatch urgently all possible reinforcements to the British Army in France. This did not involve a serious call on merchant tonnage, but raised difficult questions of protection with which the Admiralty promptly coped. Certain civilian cross-Channel services were temporarily discontinued in order that ships usually employed on those services might be appropriated for the conveyance of troops, but beyond this the problem was mainly a naval one. At the same time, however, orders were given by the War Cabinet at the beginning of April that every effort was to be made to convey American troops to this country in the largest possible numbers.

In order to effect this every available ship suitable for the conveyance of troops was taken from every trade route in the world and diverted to the North Atlantic. The number of additional ships put into the service between the 31st March and the end of August was 124. By this means an average of over 150,000 American troops per month were conveyed in British ships and 10,000 per month in Italian ships (which were placed at the disposal of the British Government by the Italian Government). In the early autumn, however, the number of troops coming forward from the United States fell off slightly, with the result that it was found possible to restore to their proper trades a number of those ships which were unsuitable for the Atlantic service in winter weather, a process which was, of course, extended after the Armistice, when all U.S. trooping was stopped.

It is estimated that every American soldier carried across the Atlantic shut out about 2 tons of cargo, while an additional loss was incurred owing to the fact that some ships had to sail with a portion of their remaining cargo space empty in order to join their convoys. The net effect of the transportation of American troops during the greater part of the year was that Great Britain sacrificed carrying capacity equal to nearly 300,000 tons of imports from the United States per month.

Over and above these two main troop movements, the necessity for reinforcing the British Army in France led to heavy troop movements in other directions, all of which threw a very considerable burden on the Ministry of Shipping and Admiralty (for protection) and all of which were successfully carried out.

The transport needs of the North Russian Military Expedition fell almost entirely on British tonnage, the United States of America, although contributing troops and stores, being unable to render any material tonnage assistance on account of their heavy trooping programme to France. The supplies shipped represented not only the requirements of the Military Expedition, but also those of the civil population, and in view of the fact that the ports of the White Sea are icebound during the winter, these supplies were based on the requirements until the following spring. Steps were taken to ensure the maintenance of an efficient service of ice-breakers under British control in the Northern waters during the winter.

The average amount of British tonnage employed on military service during the year was about 1,850,000 tons gross.

The heavy calls on the British Mercantile Marine to provide fleet auxiliaries, armed merchant cruisers, naval colliers, etc., continued during the year. An average of about 2,000,000 tons was employed on these services.

There was a net increase of 24 vessels taken up as Commissioned Fleet Auxiliaries, but arrangements were made in the autumn whereby certain of these vessels, in addition to performing their normal functions as escort ships, etc., carried essential cargoes of foodstuffs or munitions to this country.

An average of 355 vessels were allocated to the Admiralty for keeping up the supplies of coal to His Majesty's ships and dockyards, to the British Army in France, and to the bunkering depots.

All coal exports from this country represented definite direct or indirect services rendered in one form or another to the Allied cause. This was equally true, whether the service in question was the very large French programme, with its importation from the United Kingdom of more than  $1\frac{1}{2}$  million tons of coal per month, or, on the other hand, a *primâ facie* unimportant one, such as to South Georgia, where the shipment of coal was necessary in order to secure the importation into this country of whale oil, a commodity of great value for food purposes; or to Iceland, where the shipment of coal enabled certain trawlers to be obtained for use by the Allies in the anti-submarine campaign.

It has already been said that the imports into the United Kingdom during the year were (excluding oil for the Navy) 31 million tons, of which 13 million tons were foodstuffs and 15 million tons munitions. The following details are instructive :—

					Tons.
Grain and Flour	...	...	...	...	6,850,000
Meat	...	...	...	...	1,250,000
Sugar	...	...	...	...	1,300,000
Oils and Fats, including Oilseeds	...	...	...	...	1,750,000
Iron Ore	...	...	...	...	6,550,000
Other Metallic Ores	...	...	...	...	1,600,000
Timber	...	...	...	...	2,500,000
Cotton	...	...	...	...	650,000
Paper and Paper-making materials	...	...	...	...	550,000
Iron and Steel and other metals	...	...	...	...	900,000
Chemicals, including Nitrates	...	...	...	...	1,000,000

As regards oil, during the year a considerable number of new tank steamers were completed, more than counter-balancing losses. This enabled the rapidly-increasing demands of the oil-consuming departments to be met and stocks generally to be strengthened. The United States continued to assist in the transport of the oil requirements of all the European Allies, and the joint working of the British and American tanker fleets was

more closely co-ordinated with the assistance of the American Shipping Mission in London. The products carried by the tanker fleets embraced fuel oil, gas oil, kerosene, spirit (petrol) of various grades and lubricating oil. About 80 per cent. of the total was directly used for Naval and Military purposes—a proportion that during the war constantly increased. Since the middle of 1917 the tanker capacity available was supplemented by the fitting of a number of general cargo steamers to convey oil in their ballast tanks and double bottoms. By this means an important addition to the supply of oil was secured during a period when the tanker tonnage was insufficient to provide for the minimum requirements of the war.

It will be recognised that all these arrangements could only have been achieved by the co-operation of everybody concerned. The owners, masters and crews of the ships readily acquiesced in the diversion of their ships to a trade for which they were in some cases structurally unsuitable, and much depended upon the energy and ability of those responsible for the fitting of ships both in this country and abroad.

British overseas trade and the interests of the outlying parts of the Empire were ruthlessly sacrificed to the effective prosecution of the war. The sacrifice of the Overseas Dominions of the British Empire will be appreciated when it is stated that the reduction in the number of steamers berthed, as compared with the pre-war period, on the trade between the United Kingdom and India was 55 per cent., Australasia 75 per cent., the Far East nearly 100 per cent. and South Africa nearly 80 per cent.

The question of the freights to be charged for the transport of troops, Government stores and commodities generally received considerable attention during the year. The general policy of the Ministry of Shipping was to charge the actual bare cost on the Blue Book basis where the benefit of the cheap rate was secured to the British taxpayer or the consumer, and where this was not so to charge the current market rate. In the case of Allied Governments, there have been in force for a considerable time arrangements under which these Governments were provided with a certain quantity of tonnage at Blue Book or other reduced rates.

The Ministry of Shipping took over the whole responsibility for the purchase or requisitioning of tugs, barges, lighters and other small craft for all the Allies, in order to avoid wasteful competition between them.

As regards neutral tonnage, the policy of the previous year was continued, with the co-operation of the United States. Agreements were completed with Norway, Sweden and Denmark whereby the Allies in return for food supplies and coal, obtained the use of all surplus tonnage not required by the country concerned for carrying its essential supplies. In the case of Holland, as no agreement could be successfully negotiated, the Associated

Governments were forced to requisition the Dutch tonnage lying idle in their ports, but the terms on which the requisition was made and the manner in which it was carried out placed the Dutch in at least as favourable a position as the countries which were able to enter into voluntary agreements.

The neutral tonnage obtained in this way has been practically entirely devoted to the service of our Allies and was an important part of the tonnage assistance given to them. The following facts indicate the extent of that assistance during 1918 :—

*France* had the equivalent of over one million tons gross of British shipping in her service.

43 per cent. of the total imports into France were carried in British ships.

45 per cent. of the import of coal was carried in British ships.

1,725,000 tons of cereals for human consumption out of 2,732,000 tons in all, were carried in British ships in the cereal year ending August 31st, 1918, to France.

France had the benefit of coal at bunkering stations abroad which have been kept supplied by British ships.

France had in her service over 400,000 tons gross of neutral tonnage obtained by our assistance.

*Italy* had the equivalent of about three-quarters of a million tons gross of British shipping in her service.

About 49 per cent. of her total imports were carried in British ships.

79 per cent. of the coal supplied to Italy was carried in British ships.

960,000 tons of cereals for human consumption out of 2,774,000 tons in all, were carried in British ships in the cereal year ending August 31st, 1918, to Italy.

Italy had the benefit of coaling stations abroad supplied by British tonnage.

Nearly 300,000 tons gross of neutral tonnage obtained by our assistance was in her service.

*The United States* had the equivalent of over half a million tons of shipping in her service.

Over 1,000,000 American troops were brought from U.S.A. in British vessels, and over 1,000,000 were carried from the United Kingdom to France in British vessels.

The American Army in France and England was supplied with large quantities of munitions, timber, etc., which were imported into the United Kingdom in British ships.

The United Kingdom co-operated with U.S.A. to obtain neutral tonnage. By this means U.S.A. obtained nearly 1,000,000 tons gross of neutral vessels for her own purposes.

As was reported last year, the coastwise trade round the United Kingdom was brought under control and a special branch of the Ministry established to deal with it. This branch saw to the allocation of the available tonnage to the best advantage and took particular care to prevent wasteful ballast voyages.

To further the objects for which the branch was formed, an organisation was set up in Dublin to co-operate with the Ministry of Shipping in all matters relating to the trade between Great Britain and Ireland. Further, Advisory Committees were formed at the principal outports in the United Kingdom, with a Central Committee in London, in conjunction with the Port and Transit Executive Committee, for the purpose of co-ordinating the use of railroad, canal and sea transport in cases where alternative means of conveyance were available, so as to secure a maximum efficiency over all. During the year, Scales of Maximum Rates of Freight were framed and published for the principal avenues of trade round the coast, and for time-chartered steamers. The maximum rates appeared (with very few exceptions) to be mutually acceptable to merchants and shipowners.

1918 was notable for the progress made in the organisation for dealing with the questions affecting the personnel of the Mercantile Marine. The National Maritime Board had been brought into being in November, 1917, as the outcome of discussions initiated by the Ministry between the Shipping Federation, representing Shipowners, and the N.S.F.U., representing the Sailors and Firemen, its avowed object being the establishment of a greater degree of co-operation between employers and employees, and the introduction of national standard rates of pay and improved conditions of employment. Heretofore, the Ministry had negotiated with the Unions and shipowners on separate questions as they arose, but the establishment of a National Maritime Board enabled a far more comprehensive view of the problems to be taken, and many questions of wages and conditions were settled after full discussion with the interests involved. The Board has held no fewer than 115 meetings; the rates of pay of the whole of personnel have been raised, and conditions of employment have been thoroughly investigated and a large number of improvements effected. From being one of the worst paid industries of the country, the Mercantile Marine was raised to a status which compares favourably with most other industries. For example, the pay of an Able Seaman who before the war was receiving £5 10s. a month is now £11 10s., with an additional £3 per month when serving in a vessel plying through the war zone. Corresponding increases were given to other ratings. The pay of junior officers and engineers was increased from £7 10s. to £16, and that of most other navigating and engineer officers was more than doubled,

the bonus being an extra payment in each case. The Board met in separate panels, representing the different classes of personnel.

Apart from the standard rates of pay of all officers and men in passenger and cargo steamers in foreign-going and coasting services, the Board dealt with many questions of pay in small craft serving in ports and estuaries. Rules for the payment of overtime in the varying conditions of foreign and coasting trades were also adopted.

To eliminate unnecessary competition between shipowners for crews and between men for engagement an employment register was set up, and this, in conjunction with the National Registration of Seamen and the issue of an Identity and Service Certificate to each man, will enable the complete records to be kept which are necessary if the advantages of full-time employment and the elimination of the unfit and the inefficient are to be secured.

A sea school for giving intensive training to youths between 16 and 17 was also set up, and was organised to provide about 1,000 boys per annum with sufficient practical experience of the work on board merchant ships to enable them efficiently to perform the work required of them on first going to sea.

The Ministry of Shipping was essentially an organisation for war, and it consequently follows that the signing of the Armistice with Germany on the 11th November involved a fundamental change of purpose, although it is equally obvious that a sudden discontinuity of executive action was not to be anticipated. The period from the Armistice to the end of the year 1918 was but seven weeks; the change, therefore, had but little effect upon the work of the Ministry of Shipping during the year under review. Nevertheless, that the early end of the war was a possibility had not been overlooked in the previous months, and a great deal of preliminary work had been accomplished in the Ministry of Shipping, in order that the cessation of hostilities might not find the Ministry unprepared for the new conditions.

The first effect of the cessation of hostilities would presumably be felt in the various trooping programmes. The flow of American troops to Europe would have to be stopped at an early date, and arrangements made for the gradual repatriation of the American troops and the troops from the various British overseas dominions. On this assumption, for some months before the Armistice, the Ministry of Shipping worked out, in close consultation with the War Office, a detailed scheme of demobilisation. Arrangements were made for this scheme, which depended upon the day to day position of ships, to be kept constantly up to date, so that fairly accurate estimates and programmes could be produced at short notice.

It appeared likely also that the cessation of hostilities would involve material alterations in the import programmes of the

different European countries and that there would be a temporary surplus of tonnage. It was clear, for example, that the import of manufactured munitions would be stopped at the earliest possible moment, and that a certain amount of tonnage would be released from direct naval and military service. The British representatives on the various Programme Committees were accordingly asked to prepare estimates of the necessary imports of the different commodities which would probably be required during the six months succeeding the Armistice, and a detailed programme of imports was drawn up in consultation with the Ministry of Reconstruction to serve as a guide to the Ministry of Shipping during the first few months after the cessation of hostilities. Special attention was given to the question of an early re-establishment of industry on a peace basis. This programme was intended as a provisional programme, but it was hoped that by having such a programme in existence waste of tonnage would be avoided in the transitional period, while the various importing authorities were adapting themselves to the new conditions.

The truth of these anticipations was proved in the event. The flow of American troops was immediately stopped, and, in general, troop movements began to compete not with imports but with exports. The cessation of the submarine warfare enabled convoys and other protective measures to be abandoned, and so increased the importing capacity of the existing tonnage. The loss of tonnage by sinking and damage by war risks practically ceased, while the output of new and repaired tonnage continued. There was consequently a temporary surplus of tonnage for imports, particularly on the North American route, and steps were immediately taken to restore, so far as practicable, to their original trades the liners which, under the stress of the American troop programme and in accordance with the principle of importing from the nearest source, had been diverted to the North Atlantic route.

It may be claimed, therefore, that the Ministry of Shipping was not found unprepared for the cessation of hostilities, and that appropriate steps were immediately taken to deal with the new conditions.

### **B. Merchant Shipbuilding.**

When in December, 1916, a Shipping Controller was appointed to control the oversea transport of the country, Merchant Shipbuilding was placed under his control. Building for the Navy necessarily remained in the hands of the Admiralty. Later on, to secure full co-ordination in the supply of material, and in the management and work of the yards it was considered essential to bring all shipbuilding, warship and merchant, under the same direction. In May, 1917, it was therefore decided by the War Cabinet to create a new Department with the title of Admiralty Controller.

Under this arrangement the whole of the Shipbuilding, Ship-repairing and Marine Engineering Industries of the country, in addition to the production of guns, torpedoes, mines and other armament for the Navy, were vested in the Department of the Admiralty Controller. The Department was divided into three branches, one of which, under the name of the Deputy Controller for Auxiliary Shipbuilding, was charged with the production and repair of all mercantile tonnage. This policy of keeping all three sections under one head obtained until March, 1918, when the Cabinet decided that the necessities of the position made it advisable to have a separate Controller wholly concentrated on the building and repair of merchant ships, and invited Lord Pirrie to accept the position with the title of Controller-General of Merchant Shipbuilding. With this appointment the Admiralty Controller ceased to have any responsibility in connection with merchant shipping, the entire direction of the building and repair of which devolved on Lord Pirrie, who, whilst working under the First Lord of the Admiralty, had direct access, if necessary, to the War Cabinet.

Towards the end of the year the supply of steel became ample, and it was anticipated that supplies of labour would grow in the near future. Further, the separation of yards under Lord Pirrie into those set apart for merchant ship work and those for Naval work, had eliminated the competition between the two in the different yards. It seemed desirable, therefore, to revert to the natural arrangement of uniting the building of merchant ships with the responsibility for running them. On the 1st November, accordingly, the financial and Parliamentary responsibility for shipbuilding was again assumed by the Shipping Controller.

In the first stages of the war, work in the private owned shipbuilding yards was very much mixed. In one yard there would be building perhaps half a dozen types of vessels, plain cargo steamers, meat boats and naval craft of various types; a state of affairs which did not conduce to yield the maximum output.

One of the first arrangements made by the Admiralty Controller was for a division of the shipbuilding yards, under which a certain number of yards were allocated solely to merchant ship construction. Of these particular yards about 76 per cent. were, at the end of 1918, already clear of all other than merchant work; in the remainder all other work was being cleared off as quickly as possible.

The advantages of repetition work are obvious. So to each of these merchant yards was allocated the type or types of vessel to which it was most suited, and wherever possible the yard was confined to one type only.

A marked acceleration in output was achieved by the better synchronising of the construction of hulls with that of



machinery. Only a certain number of the shipbuilders construct their own machinery, and most ships, after launching, are taken to another firm of marine engineers to receive their engines and boilers. The progress of every ship on the stocks, and the construction of every set of machinery and boilers was closely watched from the start, and these were arranged so as to be ready at the same time. As in the case of hulls, arrangements were made for each engine builder to construct the type of machinery for which he was most fitted, and to give him a good run with that type.

Cases of vessels being delayed waiting machinery are now very rare. As evidence of the improvement which has been made in this direction, it may be mentioned that on January 31st, 1918, the tonnage of vessels "in the water"—that is, the vessels launched and fitting out—was 416,380 gross tons. On December 31st, 1918, this tonnage had been brought down to 277,732 gross tons, a reduction of 138,648 gross tons.

### *Standard Ships.*

In normal times the British shipbuilders constructed cargo vessels of innumerable types and dimensions, but in the early part of 1917 it was decided to limit the number of types to about a dozen, which it was considered would cover all requirements, and these twelve types are known as "Standard Ships."

Since this policy was decided upon, all the vessels laid down have, with few exceptions, been of one or other of these standard types. The advantages of standard ships are that repeat vessels can be constructed with greater ease, and all the machinery and auxiliary fittings for each type of ship are interchangeable.

Before standard ships could be built, the old types of private cargo vessels, then in course of construction, had to be cleared off the stocks. On January 1st, 1918, the number of standard ships on the stocks was 42 per cent. of the total, and on December 31st this proportion had increased to 76 per cent.

The fabricated ship carries the principle of "standardisation" considerably further. This type of vessel is one which was evolved to meet war-time necessities, and can be erected with a minimum of skilled shipyard labour. A fabricated ship is one which is built of parts made in bridge-building and constructional engineering works, and sent to the shipbuilding yard to be put together. The relatively simple work of putting these straight frame hulls together can be almost wholly undertaken by unskilled labour. This type of ship was originally designed for the National yards, but private shipbuilders have also asked to be allowed to build them, and at the close of the year 19 were under construction in private yards.

The following table, giving the gross tonnage of Merchant vessels completed from British yards since 1913, shows the progress made in the industry, as a result of the energy and organisation concentrated on this vital section of our national effort.

						<i>Merchant Vessels Completed. Gross Tons.</i>
1913	...	...	...	...	...	1,932,153
1914	...	...	...	...	...	1,683,553
1915	...	...	...	...	...	650,919
1916	...	...	...	...	...	541,552
1917	...	...	...	...	...	1,163,474
1918, January	...	...	...	58,568		
February	...	...	...	100,038		
March	...	...	...	161,674		
April	...	...	...	111,533		
May	...	...	...	197,274		
June	...	...	...	134,159		
July	...	...	...	141,948		
August	...	...	...	124,675		
September	...	...	...	144,772		
October	...	...	...	136,000		
November	...	...	...	105,093		
December	...	...	...	118,276		
						<u>1,534,110</u>

#### *Construction of Special Types of Vessels.*

During 1918 there was completed and put into service a number of special types of vessels which required more labour and took considerably longer to construct than the ordinary plain cargo steamers.

The requirements of the Navy for oil fuel necessitated the provision of oilers; passenger boats were required for transport; and meat boats, specially constructed and equipped with refrigerating machinery were also essential. These special types demanded from 30 to 50 per cent. more labour than the ordinary type of cargo vessel.

During the year the tonnage completed of these vessels was :—

						<i>Gross Tons.</i>
Oilers	...	...	...	...	...	245,223
Meat Boats	...	...	...	...	...	101,593
Passenger Boats	...	...	...	...	...	45,668
Total	...	...	...	...	...	<u>392,484</u>

The demands for these special vessels continue, and in December, 1918, there were under construction :—

	<i>Gross Tons.</i>				
Oilers ... ..	...	...	...	...	175,575
Meat Boats ... ..	...	...	...	...	114,416
Passenger Boats ... ..	...	...	...	...	40,517
					<hr/>
Total ... ..	...	...	...	...	330,508
					<hr/>

Had the slips on which the above vessels are being built been occupied by cargo vessels, and the whole energies of the industry devoted to ordinary cargo carriers, at least a further quarter of a million gross tons of shipping could have been completed and put into commission during the year.

#### *Merchant Ship Repairing.*

During 1918 there was an abnormal growth in the volume of merchant ship repairs. Even in peace times the amount of repairing and refitting is very heavy, but under war conditions this was largely augmented by the vessels damaged by mines and torpedoes; vessels damaged owing to the difficulties of navigation; and refits necessary on account of the high pressure at which our mercantile marine was operated.

In the latter months of 1918 the number of vessels salvaged after suffering damage by torpedoes or mines was considerably increased. This was due to an improvement in the organisation for salvage instituted by the Admiralty, and to devices adopted to minimise the damage.

The importance of repairing damaged ships is obvious, as it is more economical to repair vessels than to build new ones. The amount of steel required to repair a badly damaged ship is only a small percentage of that required for the construction of a ship; and, although the number of men engaged on those repairs is necessarily heavy, the labour is much less than that required to build a new vessel, and the repairs can be carried out in much shorter time.

In considering the question of merchant ship production the Controller General has always directed the efforts of his Departments to making available for service the maximum number of vessels. By sacrificing repair work more new ships could have been put into service, but the policy adopted yielded the best aggregate results, and furnished to the nation and its Allies the greatest possible carrying power.

The following table shows the total number and tonnage of the vessels repaired and returned to service during 1918. The bulk of these repairs were, of course, of a minor character, but figures are appended of the heavy repairs occupying over one month, which are included in the total.

### **Mercantile Repairs in United Kingdom.**

Completed during	Total.		Heavy Repairs (occupying over one month).	
	No.	Gross Tons.	No.	Gross Tons.
January ... ..	594	1,727,526	55	138,255
February ... ..	650	2,043,180	91	320,742
March ... ..	655	2,051,148	84	270,547
April ... ..	749	2,422,489	86	302,888
May ... ..	875	2,757,846	97	340,498
June ... ..	677	2,143,657	70	222,127
July ... ..	723	2,293,405	73	233,323
August ... ..	677	2,174,343	56	199,230
September ... ..	721	2,294,698	61	229,430
October ... ..	752	2,379,116	58	224,224
November ... ..	725	2,352,748	62	203,076
December ... ..	741	2,608,805	67	253,103
Total (12 months)...	8,539	27,248,561	860	2,937,443

### *Labour.*

As there was no surplus skilled labour in the country, the only sources from which it was possible to draw additional labour for shipbuilding in any quantity were the Forces.

During the first ten months of 1918, 14,844 men were released from the Army, and 1,020 from the Navy and Royal Air Force; 4,559 unskilled men were also enlisted as War Work Volunteers for work in the shipyards.

The total increase in labour for the first nine months of 1918 in the industry as a whole was 28,000. Of this number 8,000 were allocated to Merchant Ship Construction, the balance being divided between Merchant Ship Repairs and Naval Construction and Repairs.

The question of the division of labour as between Naval and Merchant Construction was constantly under discussion between the Naval Authorities and the Controller General, but not until October did the Naval programme permit of the transfer of men from Naval to Merchant work. The effect of this transfer, which will continue to increase in volume for several months, will only be reflected gradually in an increased output of merchant ships.

It will be noted that the increase in output during 1918 was relatively much in excess of the increase in the number of workers during the same period. This was partially due to the greater efficiency of control, together with the simplification of the design of vessels.

Another explanation is that in 1917 there was a considerable number of vessels, some of very large tonnage, which had been under construction for two, three or four years, and on which little work was being done. There was also a large number of vessels in the water awaiting machinery.

By concentrating on these partly completed vessels, and also by making the improved arrangements already referred to, under which the co-ordinated construction of hulls and machinery was improved, the output of merchant ships during 1918 was accelerated to an extent more than commensurate with the labour engaged in the industry.

This acceleration was more particularly marked in the case of the tonnage produced during the months of March and May last. In March, 1918, nine vessels, totalling 41,000 gross tons, which had been under construction for 18 months and over, were included in the completions. In May, 1918, nine vessels, totalling 80,000 gross tons, which had been under construction for two years and over, were completed, including two large vessels of 15,000 tons each, which were started before the war.

#### *Shipyard Extensions.*

During the year every assistance was given to private shipbuilders for the extension of their yards and the improvement of their plant. Up to the cessation of hostilities 304 schemes for extensions and improvements to Naval and Merchant shipyards and marine engineering and boiler-making shops had been sanctioned. Included in these schemes were the construction of 80 new shipbuilding berths and the lengthening of 19 existing berths, of which 32 and 11 respectively were completed by the end of the year. These schemes also embraced the construction of 110 berths for concrete ships, of which 87 berths were completed.

#### *Concrete Vessels.*

In February, 1918, the construction of small concrete vessels was commenced.

The advantages of concrete construction are as follows :—

- (a) The saving of steel. This is more pronounced in small vessels similar to those now building.
- (b) Very little plant is required for the equipment of the yards.
- (c) Unskilled and female labour can be employed in a greater proportion than in the case of steel vessels.

(d) The same moulds can, to an extent, be used over and over again.

(e) The simplicity of construction conduces to rapid repetition work once the yards are fairly under way.

Up to 31st December, five concrete vessels of 1,000 tons dead-weight had been completed, and 61 were under construction.

The utility of concrete ships has not hitherto been tested on a large scale, and this extensive programme was adopted as a war measure, being an additional method of increasing the tonnage output.

### *Division of Shipbuilding Resources.*

The destruction of British tonnage reached its highest point in April, 1917 (555,056 gross tons), and it is obvious that under no conditions could new tonnage have been constructed at this rate. But the efforts of the Navy were successful in devising methods for meeting submarine attacks and steadily reducing the loss of ships. Side by side with this the output of new ships grew, so that the combined efforts of protective measures and new construction cut down the net deficit between merchant ships lost and merchant ships produced from 485,345 gross tons in April, 1917, to 6,821 gross tons in September, 1918, after which the deficit disappeared, and each month showed a surplus.

But months before the new tonnage exceeded the tonnage lost, the repair and return to service of damaged vessels, in conjunction with the efficient operation of ships by the Shipping Controller, provided an increase in the effective carrying capacity, so that since January, 1918, there has been a steady increase in the number of sailings to and from British ports.

## **C. Ports.**

With a view to securing the maximum number of voyages, and therefore the maximum of carrying power out of the ships, Mr. Asquith's Government, in 1915, created the "Port and Transit Executive Committee," charged with the task of regulating work and traffic at the Ports of the Kingdom, of co-ordinating the requirements of Departmental and other interests, and of securing in the fullest possible manner an uninterrupted flow of traffic. The Committee maintains its headquarters in the offices of the Ministry of Shipping in London, but works with and through those directly responsible in each port for the handling of ships, for their cargoes, for the receiving and storage facilities in the ports, and for the means of distribution from the ports by railway, road and canal.

The Committee also works in close association with the Ministry of Shipping through the Director of Ports appointed by that Ministry, and with the Railway Executive Committee. The appointment made in 1917 by the Prime Minister of four additional representatives of organised labour proved of great value, strengthening the Committee and bringing to its aid further practical knowledge of working conditions.

In the later months of 1917 the War Cabinet decided, as one of the protective measures against submarine attacks, to adopt the convoy system for transatlantic and Mediterranean voyages. By the beginning of 1918 this system was in full operation, and inevitably accentuated the difficulties at the ports, ships coming in in fleets instead of in the daily arrivals with which the ports had been accustomed to deal. At the same time the continued losses of ships and the demands incident to the oversea transportation of the United States Armies made it more and more urgent for our Ports to give the speediest possible "turn round," so that the maximum number of voyages, and therefore the maximum of carrying power, might be got out of each individual ship.

The Port Authorities throughout the country met the changed conditions with energy and resource. Co-ordination Committees established in Liverpool, Glasgow and Bristol, Convoy Committees established in London and Liverpool, Labour Unions represented by the Transport Workers' Federation and the National Union of Railwaymen, and local Committees appointed to supervise the employment of the men of the Transport Workers' Battalions, all co-operated to get the utmost carrying power out of the shipping tonnage. As a result the total weight of the cargoes passed through the ports in the United Kingdom in 1918 was, notwithstanding our shipping losses, equal to that of the total imports of 1917, and no port was at any time during the year so blocked as to check the flow of traffic.

The Committee continued to use the Transport Workers' Battalions—men of the Home Army temporarily diverted from military duty to transport work—to supplement deficiencies in local civilian labour in the ports and, during the year, under the authority of the Government, it extended the areas in which the Battalions might be employed to the railways and canals. The men of the Battalions have only been used to supplement, and never to supplant, available civilian labour, and whilst employed on civilian work they have received full civilian rates of pay. During 1917 the strength of the Battalions was raised from about 1,400 to between 10,000 and 11,000, at which figure it remained until March, 1918, when it was increased to 15,000, at which it was maintained throughout the year.

The number of days of civilian work performed during the two years was as under :—

				<i>Number of days' work done.</i>	
				1917.	1918.
1st Quarter	...	...	...	276,805	630,204
2nd    ,,	...	...	...	403,105	758,191
3rd    ,,	...	...	...	509,211	947,046
4th    ,,	...	...	...	600,211	878,058
				<hr/>	<hr/>
				1,789,332	3,213,499
				<hr/>	<hr/>

The work done by the Battalions in 1918 was allocated as follows :—

				<i>Number of days' work done.</i>	
				1917.	1918.
In the ports	...	...	...	1,494,456	2,203,331
On the railways, including the handling of traffic at the steel works	...	...	...	227,495	746,585
On the canals	...	...	...	45,912	249,052
On agriculture	...	...	...	21,469	14,531

Since the inception of the scheme the men of the Battalions have performed 5,117,583 days' civilian work, and have handled upwards of 24,600,000 tons of goods.

This work has been of the greatest assistance in maintaining the flow of traffic at the Ports of the country, and it has been done with the most cordial co-operation of civilian labour. The help from the Battalions has again and again prevented blocks and resulting losses in the carrying power of ships, railway waggons and canal barges.

In conjunction with the Ministry of Shipping, continuous attention was given to the general maintenance of machinery and equipment at the ports, which were kept in the highest state of repair possible under the difficult conditions in regard to labour and material. Important additions were at the same time being made to the storage facilities and the machinery for handling goods. Grain and transit sheds were completed at Avonmouth, Barry, Cardiff, Newport, Swansea and Plymouth, covering an area of about 108,000 square yards, and capable of holding about 216,000 tons of grain in bulk, and it may be of interest to mention that part of the new grain and transit sheds at Cardiff was allotted to the United States vessels running to South Wales ports. Additional storage room for grain and other produce at Glasgow was obtained by the conversion of certain timber storage sheds. Portable electric conveying machinery for bag and bulk grain was fitted to grain sheds in Bristol Channel Ports, and 12 pneumatic rail-borne suction plants, for despatching grain from ship, shed, barge or railway truck, of an entirely new type and specially designed for war emergency purposes, were put in hand during the year.

In the early part of the year the Port and Transit Committee co-operated with other Departments in organising arrangements, involving in some cases the construction of additional railway sidings, for the ports of Liverpool, London, Cardiff and Manchester in view of the possible loss of the French Channel Ports, a loss which would have necessitated the diversion to the West Coast ports of East Coast traffic.



The Committee appointed, in February, 1918, a special Committee, having its headquarters in Bristol, charged with the duty of turning to better account sea-carrying power between ports in the Bristol Channel. In consequence of the retention of pre-war rates and charges on the railways much of the traffic, and in particular the coal traffic, which had previously been carried by water, had been diverted to the railways, with the result that the railways between the West of England and South Wales became so overburdened as to be unable to deal with essential traffic between points which could not be served by the sea.

The Bristol Committee, on which all interests concerned have been represented, was highly successful in its efforts. It organised the carrying power of the trows and other sailing craft, turned to the best account the Channel steamboat services, and through its work brought about a very substantial relief to the railways.

The conditions in the Bristol Channel were reflected in the general coastwise transport of the country, in the diversion of a huge tonnage of goods and mineral traffic from the sea to the railways, caused partly by the lack of vessels owing to war demands and partly by the adherence to peace rates of carriage on the railways, whilst coastwise shipping freights under war conditions had risen enormously.

As the railways became more burdened with war traffic which could not be carried by sea, and as the war demands on their rolling stock and on their men increased, it became imperative to throw back on the coasting services as much as possible of this diverted traffic, and in co-operation with the Trade Branch of the Ministry of Shipping and the Railway Executive, the Port and Transit Committee took steps early in 1918 to secure that a better use was made of Coasting Steamship Services between the United Kingdom ports. The action taken largely increased the volume of freight conveyed coastwise and afforded considerable relief to the railways.

The Committee, acting with the Board of Trade and the Ministry of Shipping carefully considered the steps to be taken to place the ports in a position to deal not only with the demobilisation of the Navy and Army, but also with the equally pressing need for the mobilisation of the nation for industry and commerce. The recommendations made by the Committee were supported by the Ministry of Reconstruction, and were embodied in the plans of the Admiralty, War Office, Air Service, and the Ministry of Munitions.

#### **D. Railways.**

No account of railway operations under Government control could be complete without reference to the Railway Executive Committee—the body which was, throughout the war, responsible for the management and working of the railway systems of the

country. The Railway Executive Committee consisted of twelve general managers, drawn from the principal railway companies of the United Kingdom. It was constituted in 1912 as a separate Department of the Board of Trade, its Chairman being the President of the Board of Trade for the time being.

On the outbreak of the War, the Government, exercising the powers created by Act of Parliament, 1871, at once took over practically the whole of the railways of Great Britain and placed them under the general direction of the Railway Executive Committee.

The number of railways and Joint Committees taken into control was 130, the total geographical mileage being 21,331, with a capital value of £1,200 millions. The mileage controlled covers all but two per cent. of the railways of Great Britain.

On the 1st of January, 1917, Government control was extended to the Irish Railways, and a special Irish Railway Executive Committee was set up with headquarters in Dublin.

The Railway Executive Committee decided, from the commencement, on a policy of leaving the staff and the working arrangements of each railway under the control of its own management, and confined its functions to co-ordinating the work of the railways, and to dealing with those general problems which were common to all the systems and which, even in peace times, would have been solved by conference amongst railway directors and managers.

The year 1918 presented many problems for railways. Three and a half years of war had caused a serious shortage in rolling stock, partly due to the requirements of the military authorities in the various war zones. The adaptation of railway workshops for the making of munitions necessitated the abandonment of all but the most urgent repairs, so that at the opening of 1918 there were, in addition to large numbers of passenger vehicles in need of attention, tens of thousands of crippled wagons unavailable for traffic. The rolling stock difficulties were further accentuated owing to our having up to the end of 1917 sent 18,000 of the Railway Companies' wagons to France and other allied countries.

Railway Companies shared in the common national shortage of men and of steel, timber and other material, and early in the year a further difficulty was experienced by the shortage of coal.

The 50 per cent. increase of fares introduced in 1917 had an appreciable effect in reducing passenger traffic for that year, but as a result of the high wages earned throughout the country and the effects of war strain on the health of the workers, the higher fares were willingly paid in 1918 for holiday travelling in spite of the fewer trains provided, resulting in abnormal traffics, particularly in the summer months. In addition, the railways were called on to carry more military, naval and other Govern-

ment passengers and to deal with hundreds of thousands of American troops who were landed at various English ports. In spite of this, another reduction in the passenger train services had to be brought about in 1918, this last alteration reducing the main line services to 40 per cent. less than they were in 1913. In the conveyance of merchandise, the railways had not only the huge increase directly due to the war—food, munitions and every description of military and naval material—but, owing to the dangers of sea traffic, millions of tons of minerals and foods normally carried coastwise were thrown back on the railways. Thus the demands of the Navy necessitated the conveyance of as much as twenty train loads of coal a day from South Wales right up to Scotland—traffic which was formerly seaborne. As an effort towards meeting these conditions drastic steps were taken to eliminate the light loading of goods wagons and to concentrate loads by allocating traffic between certain points to specific routes. This method afforded considerable relief, and by the tightening up of the demurrage regulations and using private owners' wagons the difficulties caused by the shortage in stock were partly overcome.

Some relief was afforded by the diversion of railway traffic to canals, but though considerable pressure was brought to bear on traders, they were very unwilling to send their merchandise by canals in preference to railways. The Controller of Shipping also gave assistance by reconstituting coastwise services, especially in the Bristol Channel; but all these efforts still left the railways to handle traffic enormously in excess of pre-war figures.

Notwithstanding these adverse conditions in the working of traffic, the railway companies, under the urgent demands of our armies abroad, were called upon further to deplete their resources in stock, material and men. An additional 12,000 wagons were sent abroad in 1918, making 30,000 in all. The total number of locomotives despatched increased from 600 to 700, ambulance and leave trains to 75, the latter numbering several hundred vehicles.

At various stages of the war 30,000 stretchers were manufactured and supplied to the War Office; hundreds of special wagons of all descriptions were constructed and sent abroad, and for the maintenance of the whole of the wagons and locomotives a full supply of spare parts was furnished.

Two thousand five hundred platelayers' trolleys were sent to France. A number of high power and electric gantry cranes were delivered for use on the lines of communication, and railway workshops were designed and constructed at various points in France, and, to a great extent, were equipped with machinery taken from the locomotive shops of the British Railways.

In the railway shops of the country the companies continued to make munitions, the output for the year representing a value of

five million sterling. The total manufactures during the war amounted to fifteen and a quarter millions; all at absolute cost price.

The various demands on the railway companies for equipment caused much dislocation in the manipulation of the traffic, and this was further complicated by the necessity for releasing additional men for the naval and military forces. These enlistments in 1918 absorbed over 54,000 men, making a total contribution of 184,475 for the various units. Though the places of these men were largely filled by women or men ineligible for military service, the substitutes necessarily lacked the knowledge and experience of those they replaced.

Principal officers of the companies were freely loaned to the Government for special duties, and over 2,000 men of all grades, chiefly clerks, assisted in carrying on the work of the various Government offices.

The depleted staff was only able to carry on by the reduction of passenger train mileage, the use of private owners' wagons, the re-organisation of goods trains, the restrictions on passengers' luggage and many other methods. Railwaymen cheerfully worked longer hours in the national interest, and the Select Committee on Transport in its report on the working of the railways under war conditions said :—

“ The changes which have been introduced and the high efficiency which has been witnessed in the working of the traffic by the railways during the war, have been due far more to a patriotic determination on the part of all concerned to do their utmost to assist the country in the time of national emergency, regardless of corporate or personal interests, than to the direct imposition by the Government of its will upon the railway companies.

“ The success that has attended the operation of the railways throughout the war, which has been superior to that witnessed in any other of the belligerent countries, affords conclusive proof both of the adequacy of the arrangements which had been made in advance, and of the capacity of those who had been concerned with their execution. There has been little dislocation notwithstanding that in addition to a very large Government traffic the volume of civilian traffic both of passenger and goods has been heavier than in pre-war days, that large numbers of the staff have been inexperienced, and that considerable demands have been made upon the railways for rolling stock and materials of all kinds for use with the armies abroad.”

Soon after the signing of the Armistice the strain of war traffic increased enormously, involving considerable congestion on the already overtaxed railways. Demobilised munition workers who

had left their homes for other parts of the country had to be taken home. 150,000 prisoners of war were repatriated, being first brought from the ports to reception camps, and thence conveyed to hospitals or to their homes throughout the country. Belgian refugees were sent back to Belgium. Demobilisation commenced in December, 12,000 men being dealt with in a day. This meant the conveyance of 12,000 men from ports of arrival to dispersal camps and from thence to their homes, equivalent to 24,000 a day. Christmas leave of the forces in the United Kingdom started on December 7th, and up to the end of the year the railway companies carried approximately three-quarters of a million soldiers before and after Christmas. Large numbers of civilians travelled to and from the returned prisoners' camps to visit their relatives, and on top of this came the ordinary Christmas traffic together with American and Empire troops paying a round of visits throughout the United Kingdom.

The trains were abnormally crowded, and railway travellers were put to a considerable amount of inconvenience and discomfort; but notwithstanding the severe strain, the railway systems stood the test well and met all the demands made upon them.

The relations between the Government and the railway employees continued to be satisfactory throughout the year. At the end of 1917 the total war bonus granted to railway servants was :—

		Total Increase per Week.			
		Operating Departments.		Railway Shops.	
		s.	d.	s.	d.
Men over 18	...	21	0	20	0
Men under 18	...	10	6	10	0
Women over 18	...	8	6	10	0
Women under 18	...	4	3	5	0

Further demands, based on the cost of living, were presented by the Railway Men's Unions, and increases in the bonuses were granted in April, September and November, the total war bonuses at the end of 1918 being :—

		Total Increase per Week.			
		Operating Departments.			
		s.	d.		
Men over 18	...	...	...	33	0
Men under 18	...	...	...	16	6
Women over 18	...	...	...	17	6
Women under 18	...	...	...	8	9

In November, 1918, the advance then given was based on an agreed scheme for adjusting the amount of war wage upon the cost of living as shown in the official figures of the *Labour Gazette* issued by the Ministry of Labour.

With the exception of shopmen, all employees, including clerical staff, participated in the war wage.

Railway shopmen were granted war wage advances at various times during the year, the total war wage in December, 1918, being :—

	per week.	
	s.	d.
Men over 18 years of age ...	28	6 plus 12½ per cent.
Men 18 to 21 years of age ...	32	6
Men under 18 years of age ...	16	9
Women 18 years and over ...	20	0
Women under 18 years ...	10	0

On December 6th the Government conceded an eight-hour day to railwaymen, the official statement being :—

1. The principle of an eight-hour day to all members of the wages staff has been conceded, and is to come into operation on February 1st next.
2. All existing conditions of service are to remain unaltered pending the decision of a committee, to be set up as soon as possible, to review wages and other conditions of service of railwaymen in Great Britain and Ireland.

An application for the extension of the 47-hour week in the engineering and allied trades to railway shopmen was also granted as from January 1st, 1919.

### **E. Canals.**

Of the 2,500 miles of important canals and waterways in England and Wales, 1,025 miles are owned by Railway Companies, and have, since 1914, formed part of the Railway undertakings taken over by the Government and managed, under the supervision of the Board of Trade, by the Railway Executive Committee.

In March, 1917, the War Cabinet, with a view to securing greater service from the remaining canal system, appointed a Canal Control Committee. This Committee, for the purpose of securing localised control, created four Sub-Committees, three with their headquarters at Leeds, Birmingham and London respectively, covering the canals of England and Wales, and the fourth with offices in Dublin, dealing with the canals of Ireland.

Up to the end of 1918 the Canal Committee had taken over the control of 31 separate companies—26 in England and Wales, 5 in Ireland—with a total waterway of 1,530 miles. During 1918 two companies were added to the list. The controlled mileage is as follows :—

Controlled through the Railway Executive ...	...	1,025 miles.
„ „ „ Canal Control Committee in		
England and Wales ...	1,226	„
„ „ „ Canal Control Committee in		
Ireland ...	304	„
making a total of 2,555 miles controlled.		

The work which has been done by the Committee during the past year may be divided under four main heads, viz. :—

1. Labour.
2. Finance.
3. Maintenance.
4. Traffic.

#### *Labour.*

As was pointed out in the previous report, controlled Canal Companies lost between 1914 and 1917 nearly 3,000 men. In addition, Canal Carriers and Bye-Traders had lost a large proportion of their staffs, so that the total labour available for canal work in 1917 was probably 50 per cent. less than in 1914.

The first work of the Canal Committee was to prevent, as far as was compatible with national interests, the further depletion of the available experienced canal men. No effort was made to retain men under 25 years of age, but protection was claimed for all men over 25, with the result that up to the date of the Armistice 8,000 canal men were exempted from military service. In addition, a number of men of low medical category with knowledge of canal work were released from the Army and resumed work on the canals under their former employers.

In addition, 1,000 men were obtained from the Transport Workers' Battalion, which consists of men belonging to the Home Army, but temporarily allocated for transport work on Railways, Docks or Canals. Only a small proportion of the men allotted from the Transport Workers' Battalion had previously had experience on canals, and a school for training boatmen was therefore started at Devizes. Between August, 1917, and June, 1918, 209 men passed through this school, and received a training which averaged three weeks in duration. When trained, the men were afterwards drafted to Canal Carriers and Companies for employment, all of course remaining in the Battalion. Later in 1918 this school was closed, as a number of the Canal Companies and Traders took up the work of training the men themselves. The school performed a very useful service, resulting in additional boatmen being made available for transport work.

In all questions of War Wages the Canal Control Committee has, in respect of the operating staff, followed the advances agreed from time to time by the Railway Executive Committee, whilst applications from various classes of tradesmen engaged in Canal work have been referred to the decision of the Committee on Production.

#### *Finance.*

On taking over the canals, the Government agreed to apply the same financial guarantees that they had arranged on the outbreak of war in respect of the railways, viz., a guarantee of the net revenue of the year 1913. Under this agreement there

was paid, up to the 31st December, 1918, by way of compensation, £1,034,527 in respect of English and Welsh canals and £52,046 in respect of Irish canals. In this connection it should be pointed out that the volume of traffic over the canals was necessarily much less than in the year 1913. On the other hand, whilst the tolls chargeable by the Canal Companies remained stationary, the expenditure of the Companies was greatly increased by the payment of war wages and bonuses and by the increased cost of every class of material, the war bonuses alone representing 50 per cent. of the total compensation paid. Whilst it was essential in the interest of the country and in the prosecution of the war that the canals should be utilised in every way possible, they could not without compensation have been kept open and in operation.

Whilst a few canal companies act also as carriers, in the majority of cases tonnage is conveyed by private firms who trade as "canal carriers" or by individual firms conveying their own traffic. During 1918 an arrangement for the control of carriers with more than 10 boats was brought into operation, with the result that six carrying companies were controlled, having a fleet of 384 boats in commission. These carrying companies were subject to the same increases in wages and cost of material as the canal owners. Under these conditions an arrangement was made under which the "canal carriers" were guaranteed the net revenue of the year 1913 provided they kept in commission and working as many boats as they had engaged in that year. If the number of boats in commission is less or more than in the year 1913 the guarantee is reduced or increased proportionately. Up to the end of 1918 a total sum of £33,721 was paid as compensation under this arrangement to carriers in England and Wales and £4,274 to carriers in Ireland.

#### *Maintenance.*

The work of maintaining the canals under the control of the Committee was carried on during the past year in the best manner possible, consistent with the labour available. During the winter months difficulties are caused by the accumulation of ice. A special scheme was organised to deal with the obstruction, and while in former years traffic has frequently been held up for weeks at a time by the accumulation of ice, during the past year, owing to the arrangements made, no stoppage of traffic ensued.

Considerable care was also devoted to maintaining the water supply and to securing the necessary dredging. The latter had, prior to the Canal Committee control, been, as a result of shortage of labour, in many cases neglected. A careful watch was kept by the Sub-Committees in the case of any difficulties in the conditions of the waterways, and steps were immediately taken to remedy them.



*Traffic.*

One of the most important duties entrusted to the Canal Control Committee was to secure the conveyance of traffic by canal, and to relieve the railways, as far as possible, of traffic which could equally well go by waterway as by rail. The Canal Control Committee concentrated its effort on this as its principal object, keeping in close touch with the Railway Executive, the Ministries of Food and Munitions and other Government Departments. As a result the railways were relieved of the carriage of a very large volume of food and munitions—about 400,000 tons of wheat having been conveyed by the Northern Canals in the year ending June, 1918.

There has always been a large amount of coal traffic on canals, and in this direction the Committee have succeeded in assisting the railways by diverting further coal tonnage to the canals.

During 1918 the Committee issued, for the information of Government Departments, manufacturers and all senders and receivers of traffic, a handbook on canals giving detailed information regarding the canals under its control, the towns served by them, the names and addresses of public carriers on them, and various other particulars.

## CHAPTER XII.

**THE CONTROL AND DEVELOPMENT  
OF INDUSTRY.**

In the War Cabinet Report for last year it was pointed out that a broad definition of the character of Government control in 1917 as compared with preceding years would show that prior to that year control had been more or less confined to industries or sections of industries essential to war needs, whilst during 1917 State control was extended until it covered not only activities directly affecting the military and naval effort, but also the majority of products and services required for civilian life.

By the end of 1917 so many industries were departmentally controlled—coal, metallurgical ores and manufactures, textiles, oils, timber, food, railways, canals, shipping—that further extensions within our country were neither necessary nor possible. But there was pressing need to secure increased co-operation amongst the Allies in purchase and transport, in order to prevent competition amongst themselves for the restricted supplies which each of them badly wanted, and to ensure that the material and transport available was so allocated that the military and naval effort of none of the Allies should suffer, and that the hardships to their civilian populations should be reduced to the minimum possible under the circumstances of war.

Thus greater co-action became imperative, and an attempt at a broad characterisation of the control movement in the year under review would show that from the commencement of 1918 to the signing of the Armistice the control of industry was steadily extending from national to international. The control of the transport and the destination of the coal and shipping of Great Britain and of the grain and meal and oil of the United States of America passed from the hands of the owning country into the hands of Councils and Conferences of all the Allies.

The ruling factor in all these questions was shipping. In 1917 the requisition by the Ministry of Shipping had been extended until it covered the whole mercantile shipping of the United Kingdom. The United States, soon after their entry into the war, adopted the same policy in regard to American-owned tonnage, whilst each of the Allies had absorbed into its service numbers of neutral ships to supplement its own mercantile fleet. But the need of each nation was in no measure proportionate to the shipping it owned and controlled, and it was essential that a combined Council should be constituted to secure the best use in the joint service of the Allies of all available means of oversea transport. This was met by the formation, in December, 1917, of the Allied Maritime Transport Council, consisting of two representatives of

each of the four nations, France, Italy, the United States and Britain. From this Transport Council sprang a series of Inter-Allied Committees, each charged with the work of co-ordinating, for its particular section, the purchase and distribution of the principal supplies. Separate Committees were formed for :—Food ; wool ; cotton ; leather ; tobacco ; paper ; timber ; mineral oils ; flax, hemp and jute ; and coal and coke.

A good instance of the value of this policy was provided by the Coal supplies for Italy. Shortage of shipping had made it impossible to furnish tonnage for conveying either British or American coal over the relatively long sea voyage to Italian ports. The Allied Committee met this by arranging for the despatch of coal by rail from the French coalfields, replacing it by sending British coal to the Western French ports.

Whilst these Committees of the Allied Maritime Transport Council secured a fair division amongst the Allies of supplies from all parts of the world, arrangements were completed under which the British Government took charge of all negotiations for the placing of Allied orders with British firms. This extension of Government control was made during 1918, prior to which each Government placed its orders in the United Kingdom and negotiated prices and financial arrangements directly with British firms. The active participation of the United States of America in the war rendered such a policy more important, particularly because, partly owing to shipping and partly to financial considerations, it was arranged that a large part of the requirements of the American Army should be provided from this country. Under these arrangements of purchase through our Government Departments, large supplies were provided for France, Italy, Russia, Serbia, Montenegro and Roumania. Throughout 1918 the demands for the United States Government were very heavy, as it was necessary to furnish from this country practically all the materials required for the upkeep of their Army in Europe.

After the signing of the Armistice the work was extended to embrace the supply of clothing, foodstuffs, and other necessities for the civilian populations of various liberated areas in Europe, and for distribution through the Commission in Northern Russia. The Departments undertook also, at the request of the United States, to deal with the cancellation, termination, adjustment and settlement of all outstanding contracts in this country for supplies intended for use by the United States forces.

The action of the State in relation to iron and steel and most metallurgical products, to food and to transport, are dealt with in other Chapters.

### **A. Coal.**

In last year's report an account was given of the difficulties affecting the coal supply which led to Government taking over the

control of the mines at the commencement of 1917. These difficulties were intensified during 1918, the principal cause being the great reduction in output following the recruitment of about 80,000 men from the mines for service with the forces owing to the situation created by the German advance at the end of March. This advance not only brought about the depletion of the coal workers' ranks, but necessitated supplying a large additional amount of coal to France in consequence of the loss of output from the French mines in the Pas de Calais owing to the enemy over-running that great coalfield. At the very time when the effects of the recruitment of miners and of the increase in the French demand were being most severely felt output was further reduced through recurring attacks of influenza among the miners.

The effect may be gauged from the following tables showing (a) the quarterly output in 1918, and (b) the annual output, shipments and home consumption for each of the years 1913-1918 :—

(a) Quarter 31st March, 1918	...	...	60,246,000 tons.
„ 30th June, „	...	...	56,883,000 „
„ 30th Sept., „	...	...	54,574,000 „
„ 31st Dec., „	...	...	56,284,000 „

		Output.	Exports.	Home Consumption and Ships' Bunkers.
		Tons.	Tons.	Tons.
1913	...	287,412,000	77,307,000	210,105,000
1914	...	265,643,000	62,458,000	203,185,000
1915	...	253,179,000	46,322,000	206,857,000
1916	...	256,348,000	42,013,000	214,335,000
1917	...	248,473,000	38,501,000	209,972,000
1918	...	227,987,000	34,634,000	193,353,000

In considering the above figures it must be borne in mind that every ton of coal exported represented either a direct contribution to the War effort of the Allies, or an exchange for vitally necessary services from Neutrals, *e.g.*, in the form of the supply of shipping.

The shortage of coal rendered necessary both the curtailment of supplies for industrial purposes not absolutely essential to the conduct of the War, and also the extension throughout Great Britain of the system of rationing fuel for domestic purposes which was applied to the London area during the winter of 1917-18.

A Lighting, Heating and Power Order was consequently issued in March, 1918, restricting the consumption of gas or electricity to five-sixths of the amount of gas or electricity consumed on the same premises during the corresponding quarters of 1916 or 1917, whichever was the greater. The Order included other provisions restricting hours in hotels, restaurants, places of entertainment, etc., and also prohibiting the lighting of shop fronts.

The continuing scarcity of coal necessitated the issue in June of "the Household Fuel and Lighting Order," providing for the general rationing of coal and coke, gas and electricity used for heating or cooking, or for any other than industrial purposes, and also of gas and electricity used for domestic lighting purposes.

This Order, which extended to premises such as laundries, dairies, greenhouses, etc., in which occupations of a domestic or quasi-domestic character were carried on, contemplated a general reduction of 20 per cent. on a consumption of about 40,000,000 tons. At the same time economy campaigns were conducted on a large scale with a view to impressing the public with the necessity of saving coal even within the rationed allowances.

In June, 1918, a war wage of 1*s.* 6*d.* per day to colliery workers of sixteen years and over, and 9*d.* per day to those under sixteen years of age, was granted to meet the increase in the cost of living since the previous award of similar amounts in September, 1917. At the same time, in order to secure that the increase in prices imposed to meet the cost of the war wage should in no case accrue to the benefit of the owners, the Board of Trade assumed responsibility for the payment of both the September, 1917, and the June, 1918, war wages, and directed the collieries to pay to them the amounts of 2*s.* 6*d.* and 1*s.* 6*d.* per ton by which the price of coal had been increased to meet the cost of these advances in wages.

In addition to the increase in pit prices of 1*s.* 6*d.* per ton introduced in July, 1918, to meet the cost of the war wage, an increase of 2*s.* 6*d.* per ton in pit prices was made in June, 1918, to meet general increases in working costs, including the increased costs due to the reduction in output through recruitment of the miners.

While the prices of all coal supplied for home consumption or for export to the Allies remained strictly limited, the effect of the reduction in output on the export trade was to cause prices to rise very rapidly until in the latter part of the year quotations even as high as 100*s.* per ton f.o.b. were occasionally made for Best Steam Coal, and a price of 90*s.* f.o.b. was maintained for a considerable period in certain districts.

When the Directions of the Board of Trade affecting the Sale of Coal for export were revised in October, 1918, the schedules of minimum prices applicable to neutral trade were based on 70*s.* per ton f.o.b. for Best Large Coal, and these are still in operation.

To sum up the situation it may be said that the main problem during the year was to maintain supplies of coal at reasonable prices for home consumption and to the Allies, and by means of the machinery of distribution and rationing, price control and regulation of exports by licence, these results were substantially achieved.

### **B. Mineral Oils.**

Owing to the prolongation of the war and the consequent development and expansion of munition factories, motor transport, aviation and naval services, the requirements of petroleum products and the administrative work in connection therewith increased to such an extent, and the necessity of maintaining and enhancing the supply of such products was so pressing, that in May, 1917, it was found advisable to appoint a Cabinet Minister to be responsible for all questions relating to Petroleum, and Mr. Walter Long, Secretary of State for the Colonies, at the request of the Prime Minister, undertook the office. He at once appointed Professor (now Sir John) Cadman as his chief Executive Officer. Sir John Cadman had been adviser to the Colonial Office on oil questions and Professor of Mining and Technology at the University of Birmingham.

To ensure the maintenance of adequate supplies for all services, to handle matters of general policy and to co-ordinate the work of the various Departments, a special Executive body was formed under the title of H.M. Petroleum Executive. Various special departments were organised to deal with the main divisions of production, distribution and consumption. The Mineral Oil Production Department was constituted, and the work of distribution in the British Isles was entrusted to a department named the Petroleum Pool Board.

As indicative of the enormous growth in consumption it may be noted that the total imports of petroleum products into the United Kingdom in 1913 were under 2 million tons, whereas in 1917 they amounted to well over 4 million tons.

Requirements, which in the ordinary course of events would have matured only after years of gradual development, became immediate and vital necessities, and practically every phase of naval and military activity led to increasing calls for petroleum products. Battle cruisers, destroyers, submarine chasers, airships, aeroplanes, tanks, motor lorries—all were driven and lubricated with oil, of which more and more was needed, both by ourselves and by our Allies.

The work of meeting these demands was further complicated by transport difficulties. Whilst ourselves possessing a fairly large fleet of tank steamers, our Allies were not in so advantageous a position, and British and American vessels had to be provided for the transportation of their supplies.

Mr. Walter Long, in undertaking control, found himself faced with a problem as complex as it was urgent. Oil stocks in Europe represented only a few weeks' consumption; the intensified submarine campaign was rendering more and more difficult the transport from America and from Eastern sources; whilst the

ever-growing demands of the armies and navies must be met unless the success of the Allied cause was to be imperilled.

The strongest efforts were directed to dealing with the danger. Every factor was closely examined, home production was developed, economies enforced, civilian consumption drastically cut down, and new methods devised by which the oversea carriage of a greater volume of imports was ensured. By these means the critical months were tided over, the continuously expanding demand was met, and stocks were built up to a figure which provided a better margin of safety. The results achieved can be gathered from the following figures. In June, 1917, the consumption was 397,055 tons against available stocks of 951,575 tons. In April, 1918, stocks stood at 1,463,332 tons, an increase of over half a million tons, although in the meantime the monthly rate of consumption had risen to 463,198 tons. From that time onwards, notwithstanding the continuance of the high rate of consumption, the work of the Petroleum Executive effected gradual but regular improvement, until in October, 1918, against a consumption of 495,156 tons stocks were held totalling 1,813,711 tons.

An important factor in the recovery was the adoption of the plan of conveying oil in the double bottoms of cargo vessels. By this means over a million tons had been brought to this country from the United States when hostilities ceased, at the cost, of course, of shutting out large quantities of other cargo.

The entry into the war of the United States of America, which was the principal producing country and from which the major portion of the Allied requirements were drawn, created new questions of supply, demand and transport. To meet these and to secure the best co-operation with the United States and our other Allies, a periodical inter-change of views was arranged. At first, the conferences were more particularly between the British and American Government—the two Governments most closely concerned—with regard to the economical use of tank tonnage, the basis of such negotiations being that each country should as far as possible be supplied from the nearest source. The problem was one of a most intricate nature, involving the re-routing of steamers, and a resultant hardship to trade interests in various parts of the world, which necessitated arrangements for re-adjustment after the war. These exchanges of views led, in November, 1917, to an Inter-Allied consultation, when it was decided to form an Inter-Allied Petroleum Council between Great Britain, France, Italy and the United States, primarily to consider the best means of providing the Allied requirements of petroleum products. Sessions of this Council have been held monthly since May, 1918, and the daily administrative work of the Council was conducted by H.M. Petroleum Executive.

A special Programme Committee was nominated by the Council to report from time to time as to the exact needs of the Allies,

and very complete returns were regularly rendered by each Ally and proved of the utmost value.

Commissions on Tank Storage and Specifications were appointed by the Inter-Allied Petroleum Council and did valuable work. The former visited France and the latter America.

To avoid competition in the placing of orders in the United States, an Allocation Committee was appointed by the Fuel Administration there, and later the prices of the various products for the Allies were also fixed. To prevent buying in excess of requirements, it was arranged that the Purchasing Programmes of Great Britain, France and Italy should be approved by the Inter-Allied Petroleum Council.

Meanwhile the economies and restrictions exercised in 1917 had to be maintained, and contributed their full quota to the great struggle. The saving on civilian consumption of petrol in the United Kingdom was sufficient to supply the whole needs of the British Armies in France.

Side by side with economy in consumption serious efforts were made to increase the production of oil from home sources.

The acute shortage of coal naturally affected the development of the production of oil from cannel coal, but nevertheless considerable progress was made. Carbonisation rose from about 650 tons a week in May to over 2,500 tons a week in November, and the production of oil from 100 tons a week to nearly 300 tons a week.

With regard to petroleum deposits, actual work in the way of boring was begun in October, 1918, in Derbyshire, and it is hoped that it will shortly be definitely known whether oil exists in that area in reliable quantities.

Technical investigations dealing with the possibilities of Gas Traction and the use of Alcohol as a motor fuel are also being carried out.

In conclusion, whilst the many problems occasioned by the war have demanded chief attention, an endeavour was also made to look ahead and at the same time to formulate a policy as to the development of the oil resources of the Empire.

### **C. Timber.**

The close of 1917 saw the imports of timber, including mining timber, reduced to a scale of 2,875,000 tons per annum compared with over 11,500,000 tons in 1913. The output of home-grown timber had in the same period been expanded from 900,000 tons to 3,000,000 tons. Thus the total quantity of home-grown and imported totalled in 1917 approximately 5,875,000 tons against 12,400,000 tons in 1913. This enormous decrease was accounted



for by the slowing down or stoppage of building and other wood-consuming industries, the smaller quantities of pitwood required in the mines and the strict economies introduced in the use of wood by Government Departments and private buyers.

With the object of diverting to the transport of food and war material the maximum shipping tonnage, efforts had throughout 1917 been concentrated on the felling of home-grown timber. British workers, men and women, were employed; Forestry Units came from Canada, Newfoundland and the United States; Portuguese, surplus seamen (Finns, &c.), and German prisoners were utilised, and altogether in 1917 about 15,000 additional workers were engaged in producing timber from the forests of the United Kingdom.

In 1918 these efforts were continued, and the output of home-grown timber rose to 4,250,000 tons, of which about 2,000,000 tons represented mining timber. This great increase, bringing the annual output up to nearly five times the pre-war scale, was achieved by the united efforts of the Timber Trade and the Timber Supply Department, assisted by the Canadian Forestry Corps.

The additional tonnage secured from home forests in 1918 enabled the Government to reduce still further importations of timber, releasing at a time of great shipping shortage a tonnage space of over a million tons, which was thus rendered available for the conveyance of increased munitions and food, and supplies for the American Armies.

At 1st October, 1918, the Department employed about 9,300 British workmen, 1,740 Portuguese, 1,124 surplus seamen—mostly Finns from torpedoed ships—84 Danes, 3,035 prisoners of war and 2,323 women fellers and measurers. In addition the Canadian Forestry Corps in Great Britain at that date comprised 7,518 men, and the Newfoundland Forestry Corps 427 men. The contingent of lumbermen from New England, to which reference was made in the Report for 1917, was afterwards absorbed in the American Forestry Corps for service in France. Including the mills of the Canadian Forestry Corps, there were at 1st October, 1918, 328 mills working for the Department, the output of which had increased by about 250 per cent., in spite of difficulties resulting from shortage of machinery and transport and from the demand for men for the Army.

Women have been employed as measurers and to some extent as fellers and have given satisfaction, but it should be borne in mind that they can only be employed on the lighter sides of the industry, and that for the greater part of the work able-bodied young men are of the greatest importance.

In spite of the rigid economy and the great increase of Home Grown Production, the insistent calls for timber depleted stocks to the lowest level consistent with safety. The original estimates

made of our requirements for our own Forces in 1918 had to be greatly increased, and large new demands arose from the United States Armies, whose needs in France had to be mainly met from European sources.

In 1916, the British, French and Belgian Governments set up a joint body called the "Commission Internationale d'Achats de Bois" charged with the work of co-ordinating the purchase of timber for the two countries. This body continued during 1917 and 1918, and representatives of the United States and Italy were added. A Timber Programme Committee was also created under the Allied Maritime Transport Council to regulate and secure the tonnage necessary for the adequate supply of timber to all the Allies.

A Timber Allocation Committee of representatives of Government Departments using timber was also formed, as a Sub-Committee of the War Priorities Committee, at the end of 1917.

During the year direct purchase and importation on Government account was continued through the agency of the Government buyer. In the Spring of 1918 the control of imports was further extended, dealing in timber abroad was prohibited except by permit, and a scheme was evolved for the purchasing of all foreign softwood by the Government. Arrangements were made for distribution to contractors and other consumers through the timber merchants, the trade being rationed from 22nd July on the basis of pre-war purchases.

Prices of imported softwood timber were at the beginning of 1918 regulated by Army Council Orders and were based upon the prices ruling in January, 1917. These orders were found in practice very difficult to administer on account of the great variations in price admissible according to the locality and the number of times the timber had changed hands. It was therefore decided to undertake the difficult task of fixing maximum prices for imported softwoods applicable to the whole of the United Kingdom. This was done under a comprehensive order called the Timber Control Order, 1918, dated 16th July, 1918, replacing previous orders dealing with the importation and prices of foreign timber. This order prepared the way for the softwood rationing scheme already described.

Under the same order the regulations on the subject of the sale of standing timber were made more comprehensive, and included the provision that the transfer of large blocks of standing timber with the estates on which they stood should be subject to permit.

Auction sales of timber were also regulated, and the sale of home-grown timber, both sawn and in the log, was for the first time made subject to permit, this step having been found necessary in order to prevent waste.

Maximum prices of home-grown timber were also submitted to careful revision, and the result embodied in the Home Grown Timber Prices Order, 1918, dated 25th March. By this order maximum prices were laid down for all varieties of home grown timber other than mining timber.

Mining timber was dealt with by the Pitwood Order, 1918, dated 29th July, which not only fixed maximum prices, but gave legal effect to the Pitwood or Colliery areas announced by the Controller of Coal Mines in August, 1917. Permits were required before mining timber could be consigned from one Pitwood Area to another, and by this means long haulage of Pitwood by rail was avoided as far as possible.

During 1918; the Timber Supply Department, which in its beginning was concerned almost entirely with softwoods, undertook the supply and control of practically all timber required for war purposes, including not only imported hardwoods, previously dealt with by the Admiralty, but plywood, veneer, ash and other wood required by the Department of Aircraft Production, also cane for shell baskets and many other purposes, and lignum vitae.

With regard to hardwoods, the importation was of necessity limited to consignments for Government purposes, all private purchases being prohibited. Negotiations took place with a Trade Committee of the Hardwood Section of the Timber Federation of the United Kingdom, with a view to the introduction of a rationing scheme for the disposal of the Government hardwood rejects and dunnage wood. This wood will find a ready sale, and assist in some measure to meet the demands of the hardwood-using trades throughout the Kingdom.

Special efforts were made to provide supplies of the high grade ash timber used in aeroplane construction, this matter having been taken over from the Air Board towards the end of 1917. The Aerial League, an unofficial organisation which lent its assistance, issued in December, 1917, a memorial to owners of woods inviting them to offer their ash trees to the Timber Supply Department. Suitable trees brought to the Department's notice in this and other ways were purchased in large numbers, and supplies of ash were also arranged for from France.

The shortage of coal caused special attention to be given to the use of wood for fuel. Arrangements were made by the Timber Supply Department for as much fuel wood as possible to be placed at the disposal of the Coal Controller, and the Fuel Wood Order, dated 27th September, 1918, provided for maximum prices and distributing machinery. By this means about a million tons of wood was made available to supplement the coal rations.

In order to ascertain approximately what reserves of standing timber were available in the country, a rough survey of woods was

made by the Officers of the Department. The results indicated that the supply of mature conifers were rapidly becoming depleted. Of hardwoods, notably elm and oak, there were still very considerable stocks. The reserves of Pitwood were sufficient to meet prospective demands for some years ahead. This was only possible by the sacrifice of immature woods, which, if conserved, would help to provide supplies of sawn timber in later years.

It should be added that immediately after the Armistice steps were taken to relax the control where possible, and permits to purchase timber in the United Kingdom were abolished at the end of 1918.

### **D. Textiles.**

With regard to textiles generally, it may be claimed that the co-operation of employers and workpeople in the representative organisations established, in which they were also associated with departmental colleagues, achieved notable success in dealing with unexampled difficulties in the supply of raw material, the utilisation of plant, the organisation of the available labour, and the problems of transport and of the equitable treatment of civil trade.

By these means phenomenal demands on the available material and output were met whilst keeping profits at a reasonable rate, measured by a pre-war standard.

*Cotton.*—In last year's Report some account was given of the successive stages by which the system of public competitive tendering—the method of Government purchase adopted in peace time, when naval and military requirements constituted a relatively small proportion of the demands on the staple industries of the country—was modified, and largely displaced, by measures which were found to be essential in the interests of both supply and economy, at a time when the requirements of the Forces were absorbing the major part of the products of industries which had been largely depleted of labour and material. Steps were taken to secure for Government needs a first call on raw materials, and prices were systematically controlled.

In the cases of cotton, jute, flax, and to a more limited extent, hemp goods, the situation was met by calling in the aid of expert advice in the matter of fabric and prices and in the negotiation of contracts, together with the use of the means provided by the Defence of the Realm Regulations to obtain complete information as to the actual cost of production. As far as possible, however, the organisation of supply was decentralised, departmental agencies being established in Manchester, the metropolis of the cotton industry, and in Dundee, which has a similar pre-eminence in the jute and flax manufacturing trades.

The past year was marked by a closer co-ordination of the work of the War Office, the Admiralty, the Ministry of Muni-

tions, the Air Ministry and other public services in the matter of obtaining supplies. In general the plan was to entrust to the Department having a preponderant interest in any particular kind of material the purchase of goods of the kind in question for other Departments also. This arrangement not only eliminated any form of injurious competition for supplies between the different Departments, but secured for each of them the services of the special organisations evolved for making the best national use of the several industries. Under such a scheme the War Department, which had been by far the largest user of cotton, flax and jute goods, naturally became the purchasing agency for large classes of these stores for other Government Departments.

This tendency developed further during 1918. As an illustration may be mentioned the provision of cotton fabrics for aircraft of all kinds, which, by arrangement between the Departments concerned, was assigned to the War Office.

For the purpose of securing continuity of supply and advantageous prices, purchases of raw cotton were made on account of the British Government in the United States and West Indies, to be shipped and held in this country against the requirements of the British Government, a measure which further tended to stabilise the cost of cotton goods for the war needs of ourselves and our Allies.

*Wool.*—During the year 1918 the demands made upon this country for clothing supplies for military purposes were greater than ever before experienced in the history of the textile trade. At the same time the shortage of wool supplies owing to restricted imports had become more acute, and this, together with reduction of coal supplies and depletion of man-power, added greatly to the difficulties of production. Nevertheless the year was a record one so far as production is concerned. The requirements of the Imperial Army, Naval and Air Forces were met in full, and, in addition, it was possible for this country to equip in part the American Army in Europe and to take a larger share in clothing other Allied Armies, whilst at the same time maintaining civil needs.

During the year the Department of the Surveyor General of Supply, to which had been entrusted the control of wool and woollen fabrics, supplied :—

Cloth and Flannel	...	...	202,770,000 yards.
Blankets	...	...	17,370,000 articles.
Hosiery Goods	...	...	40,715,000 lbs.
Felt	...	...	5,500,000 ,,

In order to obtain supplies on this scale it was necessary not only to maintain the control of wool supplies but still further to extend and to tighten up the methods of control from the raw material to

the finished article. As is explained below, this control was exercised in conjunction with the trade through machinery which was set up fully representative of all sections concerned.

Raw wool purchases during the year involved an expenditure of £87,250,000, including not only the home and the Australasian clips, but also a large part of the South African clip and Falkland Island and Iceland wool, and as a result of these Government operations the issue price of wool in the United Kingdom during the year was at least 30 per cent. lower than the price of wool in North and South America, and moreover was fixed at this level for a definite period ahead.

As in previous years, the collection of the home clip was undertaken by expert wool buyers serving the Government for the purpose, whilst the Australian and New Zealand Governments again negotiated the sale of their entire clips to the Imperial Government. The price of the home clip was increased to 60 per cent. in excess of the 1914 price level, whilst the Australasian clips were bought on a basic price of 55 per cent. above the prices ruling during 1913-14, the Imperial Government bearing all risks, which were considerable, and the Australasian Governments sharing in 50 per cent. of the net profits made by the sale of wool for civil purposes. So far as wool required for British Government purposes was concerned, the Commonwealth and Dominion Governments patriotically offered the wool at the basic price.

One of the most interesting experiments initiated in connection with wool control was the establishment of the Board of Control of Wool Textile Industries in the latter part of 1917. The Board is of tripartite nature, being equally representative of employers, workpeople and the State, and in many respects it is a unique body. Unlike other bodies, which cover only sections of the trade, the Board includes all sections of the trade in every part of the United Kingdom, and this makes it possible for its members to view matters from a more general standpoint than is possible when they are considered sectionally. The primary object of its establishment was not to ensure Army supplies, but rather to deal with the most difficult problems arising from the fact that, after Government requirements had been met, rather less than 20 per cent. of the output of the trade was left for civil needs. In practice, however, the work of the Board has taken on a wider scope, and there is no question raised in connection with the Wool Textile Industries to the solution of which the Board has not contributed a most valuable part.

Not the least important of its functions was the means that it has afforded for employers, workpeople and officials to meet together with executive responsibility for the settlement of wide trade and national issues raised in connection with the Wool Textile Industry. In spite of the difficulties of short supplies of raw

material, the Board secured, by means of rationing of wool to spinners and yarn to manufacturers, what has never been assured in the industry before—even employment throughout the trade. This not only had the effect generally of steadying the industry, but it prevented the occurrence of what might otherwise have been extremely difficult situations in regard to Labour. It can, indeed, be counted to the credit of the trade and to the measures taken through the Board of Control that throughout the war no serious labour dispute has arisen among the whole of the 350,000 workpeople employed in the trade. The Board of Control does not act as an autocratic body, but as a body fully representative of the trade, working through every section and district throughout the United Kingdom by means of committees linked up with the official machinery of control. Very great difficulties, indeed, had at the outset to be overcome, misunderstandings on all sides had to be cleared up, and the broad facts of the position thoroughly understood throughout the whole of the trade, including employers and operatives. All this work has been focussed through the Board of Control, which as a representative body has been of inestimable value in keeping the whole trade in touch with developments necessitated by the abnormal conditions of the war, and of providing opportunities for employers and employed to meet together jointly to thrash out difficulties as they arose; and as an expert body in considering and deciding with the officials responsible the best means of securing supplies on an unprecedented scale with the minimum of dislocation to the trades concerned. Further, questions have been discussed which in the case of bodies less representative or with functions limited merely to relations between labour and capital would be impossible.

The Department of Wool Textile Production supplied not only the British and Allied Armies, Navies and Air Forces, but through it have been centralised the supply arrangements of wool textile goods for all Government Departments and over 2,000 Public Services throughout the Empire, amounting to a value of over £2,000,000 weekly. These requirements were co-ordinated and very considerable economies were thereby effected. In the case of some articles, *e.g.*, flannel and blankets, the pre-war production for all purposes was trebled to meet more than the large Government demands.

Owing to the centralisation of supply arrangements, it was possible without reducing quality to standardise various demands, thereby ensuring greater economy and increased production, *e.g.*, before the war the wool textile demands for the various railways were considerable and of many varieties. Without reducing quality, these during the war were standardised. Felt required for a variety of purposes, from submarine engines to water-bottles, was also standardised into five types, whereas before there were over 200 types.

Arrangements were made for production not only of clothing but of mechanical cloths for various technical purposes, such as shall-making and various manufacturing processes connected with such articles as food.

At one time serious difficulties had to be solved with regard to supplies of special cloths required by the Ministry of Munitions, the lack of which might have had the effect of holding up the shell-filling factories.

One of the more important effects of wool control has been the extent to which it caused employers and workpeople—especially employers—to associate. In the past the wool industry in Yorkshire was conducted on extremely individualistic lines, but in view of the new conditions which have obtained during the war, and which in many respects must continue after the war, the need for association and organisation was recognised to an increasing extent, and the trade organised and worked together in a measure impossible in pre-war days, and this will be of practical benefit when normal trade conditions are resumed in providing the necessary machinery by which alone wasteful methods may be eliminated and costs reduced by standardisation and specialisation of output. Reliable statistics and information with regard to the trade, which before the war were practically non-existent, have now been brought to a high degree of perfection. Excellent returns were for many years before the war made by the London Wool Brokers, but so far as the rest of the trade was concerned statistical information was by no means as perfect.

The system of costings was considerably expanded during the year, with satisfaction both to the trade and to the Government; for it is recognised that, quite apart from the actual economies immediately secured for the public purse, the knowledge gained by the trade by reason of the costings system will have a very considerable and beneficial effect upon the methods of production after the war when the trade will again have to meet the competition of the world.

It is obvious that when only 20 per cent. of the production of a trade is available for civil purposes, civil supplies must necessarily decrease, whilst prices must advance and quality in many instances deteriorate. It must, however, be remembered that high prices for civil goods were due to many other causes, *e.g.*, the cheaper raw material was required almost entirely for Government purposes, and of necessity higher-priced raw material had to be used for the civil trade.

To meet this situation, it was decided, after careful consideration, to place upon the market clothing of standard quality and fixed prices to compete with and be a check upon higher-priced and inferior goods on the market. Already about £15,000,000 worth, comprising over 9,000,000 yards of standard cloth and over 2,000,000 lbs. weight of hosiery and 1,000,000 blankets, have been



manufactured, and 1,000,000 yards of flannel is being put upon the market per month. Great difficulties, however, were experienced in the making up of standard clothing, for it was a question of either devoting the available production for clothing the American Army or for standard clothing. Needless to say, the standard clothing had to take a second place. An increase in the margin of production is, however, now available for the production of standard clothing, and as a result it is possible to place larger quantities of standard goods upon the market. With the coming of the Armistice, army demands were of course somewhat reduced, although not to an extent that might have been supposed. This reduction, however, made it possible to produce greater quantities of cloth for civil trade, and it is anticipated that within a short time production will be such that prices should reach a less artificial level, especially as the price of raw material is still definitely fixed for a period ahead. In addition to controlled-price cloth for men's wear, cloth for women's wear is now being produced in considerable quantities. Economies are being effected in the utilisation of surplus Government stores for this purpose, *e.g.*, the demands for shell cloth having ceased, the War Office was left with several million pounds' weight of yarn and cloth in course of manufacture for the purpose. By changing the construction of the cloth, colour, etc., this shell cloth and the yarn from which it was made has been diverted for use as women's costume cloths, put on to the market at controlled prices, the style of making up being left to the individual firms concerned, who, however, conform to a minimum standard. By this means good material at low prices is assured, and the scheme is made sufficiently elastic to allow of considerable variety in the style of goods produced. Special provision is made for infants' flannel, etc.

With the increased calls on shipping and the reduction of stocks of raw material in all Allied countries, the question of allocation of supplies became in 1918 even more acute. Allied Government wool requirements were as far as possible met from British Government stocks in Australia and New Zealand and to a minor extent from India and South Africa. In some cases shipment was undertaken by the British Government, while in others the onus of providing freight rested with the Allied Government concerned. Owing to the scarcity of shipping the Allies in some cases found it impossible to "lift" all the wool allotted to them. In order therefore to equalise as far as possible the burden as between the various Allies a Wool Programme Committee was set up by the Allied Maritime Transport Council to obtain such information as was necessary to determine the requirements of each Allied country for wool, in order that the sacrifice entailed by any shortage at the points of consumption should be equally borne by the different countries and to ensure that military demands should be fully met. By this means wool and wool products were rationed internationally. Owing to shortage of

shipping during the war a large amount of wool has accumulated overseas. Given, however, a reasonably rapid rebuilding of Allied industries and sufficiently stable financial conditions in Europe, the need of the world is such that wool stocks overseas will not be in excess of the world's textile machine capacity or of the demand for cloth from consumers. The rehabilitation of French and Belgian industry is viewed optimistically by those concerned, and the problem would appear to resolve itself rather into the extent of the purchasing power of the world during the reconstruction period. Given the necessary financial support there does not appear to be any reason why the wool textile industry should not flourish and exceed in production even its pre-war level.

The machinery of internal rationing within the trade worked well, and, in spite of shortage of supplies, even and regular employment was secured. In each district throughout the country a committee of the Board of Control was set up through which the rationing scheme was operated locally, and the whole was co-ordinated through a Joint Committee meeting centrally. Not only wool, but other accessory commodities required in production were rationed, and in some cases arrangements made for control of prices. On its technical side the Department also carried out experiments, the results of which were made available throughout the trade.

In order to deal with the question of the problems of reconstruction in the trade and the change from war to peace conditions, a Wool Council was formed consisting of representatives of raw wool and commercial and Labour interests together with officials of the various Departments concerned, including the Board of Trade, to advise with regard to wool control during the reconstruction period. The Board of Control of Wool Textile Industries, however, continues its work, including the supervision of demobilisation arrangements for the whole of the trade. In spite of the reduction of khaki demands, production is still required on Government account, in order to clothe the demobilised armies and provide for the necessitous civil population of the Allied countries. Provision of this nature is being undertaken under a scheme which ensures during the period reconstruction continuity, and above all, even distribution of employment throughout the trade. For this purpose the rationing of raw material is maintained, and contracts for khaki cloth have been diverted into the production of cloths required for civil purposes. The wool required has already been arranged for by the Government, who have purchased the Australian clips for one clear wool season after the termination of the war. The margin of wool available after these Government demands have been met is left to the trade in order that civil connections may be restored as quickly as possible, and export trade in wool textiles expanded. The transition from Government control to private trade will be a difficult one, and will be a matter of time, but meanwhile the

trade is assured of supplies which are evenly distributed over the available machinery. Prices and employment are thereby steadied, and the way prepared for the resumption of normal trade relations.

*Flax, Hemp and Jute.*—One of the reactions of the situation in Russia was the curtailment of a principal source of supply of flax. As the result of collaboration between the War Office, the Air Ministry and other Departments, with the ready co-operation of agriculturists, the cultivation of flax was undertaken over considerable areas in Great Britain, and the area under cultivation in Ireland was much extended. Thanks also to the zeal and energy of Canadian farmers and organisers, quantities of Japanese flax were sown in the Dominion, with a view to the production of a large yield of seed for sowing in Great Britain and Ireland to meet the deficiency of supplies from normal sources.

A Flax Control Board, consisting of representatives of the employers and employees and of the public departments concerned, was engaged continuously throughout the year in supervising and co-ordinating the arrangements for securing supplies of flax, flax-seed and flax goods for war purposes, and for regulating manufacture.

Substantial supplies were provided for our Allies, France, Italy, Belgium and the United States, including 168,000,000 jute bags and 10,000,000 yards of material for tents, and 70,000,000 yards of jute cloth.

*Economies.*—In view of the scarcity of cloth the Government Departments were constantly considering measures for securing that the materials issued to contractors were not wasted, and in this connection, with the additional object of extending the area of production by utilising firms which do not possess cutting machinery, a Government Cutting Factory was established for the issue to contractors of materials already cut out.

During the year patterns and specifications of all the principal items of army clothing were reviewed by a Committee including representatives of the clothing trade, the terms of reference being to secure :—

- (1) A cheaper or more readily available material.
- (2) Articles involving less labour in making.
- (3) Articles of less finish.

As a result of the close examination of the problems, and the recommendations of the Committee adopted, a saving of about £1,500,000 will be secured in respect of army clothing per annum ; whilst in no case will these alterations adversely affect the serviceability or life of the garment for military purposes.

### **E. Miscellaneous.**

In other materials the efforts of previous years to save in cost and material were continued. The following are instances of some of the further economies secured in the year under review.

Arrangements were organised under which contractors for food supplies for the Army were supplied through the Government with packing cases and crates instead of being expected to make their own purchases of these articles. Under this scheme, 150,000 cases and crates were supplied weekly. For this purpose material cut to waste from timber used in the construction of aircraft was utilised for making packing cases. As a result of expert investigation it was also found in many instances possible to dispense with cases. The total saving effected in these directions during 1918 was well over £100,000.

In view of the urgent need of reserving steel plates for war purposes, elaborate experiments were conducted with the full co-operation of the trade, with the object of substituting cardboard containers for various food supplies which had been previously contained in tins. These experiments were completely successful, and during the year approximately 200,000,000 containers were manufactured and 320 tons of steel weekly were saved, besides other material, for use in the manufacture of munitions of war. The cardboard container was adopted with success for civilian purposes also.

### **F. Leather.**

The supply of the large and varied needs of the Army for boots, harness, saddlery, accoutrements, jerkins, gloves and other articles made of leather was well maintained. Purchases of these goods at the rate of over £20,000,000 in the year were made. The Leather Control Board, composed mainly of members of the leather trade who gave their services to the Government, had to ensure that the raw materials should be forthcoming for the manufacture, not only of these military supplies, but of the essential needs of the civilian population. Nearly two tons of hides and tanning materials are required to produce one ton of leather, and, in all, about 360,000 tons of these raw materials were consumed in the course of the year, of which less than one-fourth was produced in the United Kingdom.

The shipping situation and the exigencies of foreign exchange made economy in the use of the available materials a prime consideration with the controlling authorities, who took certain practical measures under the Defence of the Realm Regulations and otherwise, with a view to preventing waste of material and its employment for essential purposes. A very considerable saving of leather, for example, was secured by the development of a new system for repairing Army boots. The financial saving involved, which applied particularly to upper leather, of which 4 ft. is required for a new pair of

boots, amounted to about £55,000 weekly. Largely as a result of this development good stocks of Army boots were accumulated, and it proved possible to supply large quantities to the United States Forces. Other measures of economy included a prohibition on the manufacture of women's boots with uppers exceeding 7 in. in height, and the wide issue to the trade of notices to be displayed in repairers' shops urging the use of the smallest possible amount of leather for repairs, *e.g.*, a patch on a worn sole rather than its replacement by a new half sole.

The most important step to enforce economy was, however, the institution of the Certificate Scheme, which came into operation on April 1st, 1918. Under this scheme no leather could be obtained for the manufacture of boots, harness, saddlery and accoutrements for the War Office, Admiralty or other Government Department, or of civilian War-time boots, without the production of a certificate endorsed by the Department. The residue of the leather supplied for these commitments which, owing to its unsuitability or for other reasons, could not be actually employed in making the boots or other articles specified, could only be disposed of under instructions from the War Office. The scheme effected a careful rationing of the available supplies of leather.

In this connection may be mentioned the progress in the production of War-time boots, the introduction of which was mentioned in the last report. Of these boots, which were intended to provide serviceable footwear for workers and the professional classes at controlled prices, 8,000,000 pairs were manufactured during the period February/August. Leather for the purpose was specially purchased at favourable prices in the United States of America, and supplies of goatskins were requisitioned and imported to be dressed on commission into glaze kid for the higher grade boots. The output of these boots and the demand for them increased steadily.

Successful efforts were made to improve the quality of sole leather by establishing a sample room in which were kept samples of the actual leather for which each tanner was allotted prices fixed by the War Office. These samples were kept as a standard of the tanner's production, and in cases where his production had improved the extent of the improvement and the consequent increase in value were readily determined. In certain cases every tanner producing a particular class of leather was supplied with sealed samples of every grade of the leather in question. In addition, a rigorous supervision was instituted of the work done by the various tanners, every tannery being periodically visited and reported on.

The close control over leather of classes specially suitable for military requirements tended to an inflation of the prices obtainable for uncontrolled leathers, and forced the War Office to

take control of the latter also. Thus control was, for example, exercised over leather made from calfskins and horse hides.

Co-operation in the purchase of River Plate hides, from which army sole leather is made, was arranged with the United States and France, and the prices to be paid by these countries were fixed. The War Office also arranged for the supply to Italy from India of a very large proportion of the hides she required for upper leather.

The resources of the Empire were drawn upon as fully as the shipping situation allowed. Reference may be made in particular to the large quantities of tanning bark and extract obtained from South Africa, whose authorities co-operated with the War Office in fixing the price of this product. In India the tanning industry has been largely developed since the War in order to meet this country's requirements of upper leather, and it is hoped that this important trade is now sufficiently established to make more difficult a return to pre-war conditions under which the bulk of Indian raw hides were exported for tanning in enemy countries.

#### **G. Development of Overseas Trade.**

In 1917 the War Cabinet decided on the constitution of a special Department charged with the work of assisting in the development of British trade abroad. The work of the new Department, which was given the title of the Department of Overseas Trade, necessarily touched on the province of the Foreign Office and of the Board of Trade. To meet this, and to secure the fullest advantage of the organisation and influence of both these Ministries, it was arranged that the control of the Department of Overseas Trade should be entrusted to Sir Arthur D. Steel-Maitland, who should hold the dual position of additional Parliamentary Secretary to the Board of Trade and additional Parliamentary Under Secretary at the Foreign Office.

*Trade during the War.*—During 1918 the work of the Overseas Trade Department was concerned both with trade under war conditions and also after the war. As regards the first, its activities were necessarily hampered by restrictions on every side until the signing of the Armistice. The successful prosecution of the war was naturally the main consideration, and nothing else could be allowed to interfere with it. At the same time it was possible to render assistance in a certain number of specific cases, such as the formation of new enterprises to take advantage of particularly favourable opportunities, and to give support to British firms engaged in active competition with enemy undertakings in neutral countries. As, however, these were necessarily of an individual character and, in many cases, confidential, they are not suitable for mention in a general report. Apart from these individual cases, the efforts of the Department were concentrated, with a view to avoiding a disastrous break in the commercial and industrial life of the nation on the termination of

hostilities, on doing everything possible to keep the channels of our trade open and to attempt to ensure a steady, though necessarily diminished, flow of exports. A close watch was accordingly kept on any changes in the situation as regards overseas markets, and the Department assisted in bringing about an increased flow of exports wherever there appeared to be the possibility of any improvement in the direction of any particular market. Assistance was also successfully given to merchants and British manufacturers in securing priority certificates where, from the point of view of maintaining connections with certain markets, it was of special importance to arrange for the despatch of goods abroad.

One of the principal functions of the Overseas Trade Department is the provision of commercial intelligence relating to existing possible outlets for British trade. In this section of work considerable advance was made during 1918; and in numerous directions information was brought to the attention of trades, helping them to establish new connections abroad, which would be useful to them when the war was over. For this purpose a special system of reports has been built up and developed. This system aims at bringing before British firms the names of likely buyers abroad of British goods, and the reports are distributed through the Association of Chambers of Commerce and the Federation of British Industries to the individual firms likely to be interested in this country. Some 12,000 firms receive reports in this way. Other information, to which it is not desired to give the full publicity of the Board of Trade Journal or of a published report, is distributed to specially selected firms through the agency of a Special Register kept by the Department, which includes the names of some 3,200 firms.

*Trade after the War.*—Preparations for trade after the war, however, occupied the bulk of the energies of the Department during 1918, and in this connection there has been an important extension and re-organisation of the country's Overseas staff. British commercial representatives abroad, some of whom were, under the old arrangements, under the Foreign Office and some under the Board of Trade, are now all appointed and controlled by the Overseas Trade Department, and the whole overseas organisation has been remodelled. British commercial representatives stationed in foreign countries, formerly known as Commercial Attachés, are now designated Commercial Counsellors or Commercial Secretaries according to rank. Twenty-eight posts in all were approved, and candidates were within the year appointed or recommended for appointment for twenty-one of these. The appointments proposed for Russia and one or two others remained unfilled for reasons connected with the political situation. The Commercial Intelligence Officers stationed in various parts of the British Empire overseas are known as Trade Commissioners. The number of Trade Commissioners has been increased from 4 to 13, and permanent or temporary

appointments have been made to all the posts sanctioned except two, for which candidates are under consideration. With a view to ensuring the appointment of suitable officers to both the Trade Commissioner and Commercial Attaché services, candidates are interviewed and recommended for appointment by Selection Committees on which the commercial community is represented.

A Committee was also appointed to consider and make recommendations for the re-organisation of the Consular Service, and considerable progress had been made in this work before the close of the year.

With the object of maintaining the closest possible touch with manufacturers and commercial houses, arrangements were made for a regular series of official visits to this country by our overseas commercial representatives, during which they visit the various important centres of commerce and industry. In accordance with this policy, an official visit was paid in 1918 by H.M. Trade Commissioner in South Africa, in the course of which the Commissioner interviewed about 600 firms and visited about 80 works. Various Consular officers also returned from their posts abroad to visit Chambers of Commerce and other business organisations, and to meet and discuss commercial prospects and problems with the business community.

Another side of the work was to arrange for the expert investigation of oversea markets in order to ascertain the conditions and prospects for the sale of British goods in specified trades in those markets. In some instances the missions are arranged by the Department acting alone. In others it is the policy of the Department to co-operate with the Trade Associations concerned. A departmental mission has been despatched to Morocco, and joint missions have been arranged with the British Engineers' Association to investigate the prospects of the engineering trades in Brazil and Argentine, and with the London, Birmingham and Sheffield Plate and Jewellery Association to investigate the prospects of the jewellery, electroplate and allied trades in the South American markets. An economic mission was despatched to Russia in the middle of the year and spent some two months in that country acquiring such information and making such arrangements as were then practicable with a view to the eventual resumption of trade relations with Russia.

Conversely, the Department has encouraged visits to the United Kingdom of representative parties of business men from foreign countries. A tour of Serbian commercial representatives was arranged by the Department early in the year, and the Department also gave its assistance to the Federation of British Industries in arranging a tour of Greek industrial delegates. Representatives of the Department accompany the delegates on these tours.

Continual efforts are being made to render as complete as possible commercial information regarding foreign countries on



record both in the Department and in the offices of its representatives abroad. It is hoped that a thoroughly comprehensive system may be built up which will be of material benefit to the British commercial community in general.

Owing to the great importance of finance in all questions of foreign trade, particular attention has been paid to the various banking problems which are involved in the expansion of the country's export trade.

The whole value of the Overseas Trade Department necessarily depends on maintaining the closest touch with the business community, including producers, manufacturers, merchants, banks and financial interests. To promote this, an Advisory Committee was appointed, which includes representatives of manufacturers, merchants, shipping, banking, finance, Labour and the Press. Most valuable help has been received, not only from the Committee as a whole, but from individual members with reference to the subjects in which they are experts. Instances are the training of the Consular and Commercial Attaché services, the establishment of a British Commercial Enquiry Bureau, the organisation of commercial investigations abroad in particular markets and on behalf of particular trades.

A considerable advance was made during the year in the development of the home organisation. Sections had to be sub-divided from time to time as areas covered came to be dealt with more minutely. There have been two specially noticeable expansions. The creation of a separate Russian section was found necessary to deal with the peculiar and pressing commercial problems involved by the situation in Russia and Siberia. This section was called upon to supply the secretariat of the Inter-Departmental Conference instituted to consider economic questions in relation to Russia, and was also occupied with the formation and operation of a commercial organisation to act as agent of H.M. Government in supplying goods to Eastern Siberia. A Belgian section was created from the secretariat of the Belgian Trade Committee, whose labours had reached the point at which reports could be produced.

The work of the Department was greatly assisted by the able services rendered by Consuls temporarily detailed from their ordinary duties for the purpose, and by a number of voluntary workers.

## **H. Control of Raw Materials in the Oversea Empire.**

Emphasis must again be laid on the importance of the assistance rendered by the British Oversea Dominions in the economic sphere as producers of raw materials, both essential foodstuffs

and materials required either directly for munitions purposes or for essential industries. Measures of control of raw materials were in force from the very beginning of the war, when the Dominion and Colonial Governments prohibited the exportation except under licence of a number of essential commodities, and this system was continuously developed. The original intention was mainly to prevent essential supplies reaching the enemy, but as time went on the object of such prohibitions became more and more to secure for the Allied countries the supplies of which they stood in need, and, as this object became more prominent, other measures of control were adopted side by side with the prohibitions of exportation, taking in the main the form of purchase of commodities by His Majesty's Government. The effect of this system has been not only to secure essential supplies for the Allies, but also to secure them at prices much below those which it would have been necessary to pay but for the system of control adopted. The Dominion and Colonial Governments rendered invaluable assistance in the carrying out of these schemes, adopting in many cases very elaborate machinery to facilitate the purchase on advantageous terms.

Some of the most important raw materials which it was found possible to control are dealt with in detail below :—

*Wheat and other Cereals.*—During the season 1915-16 the Commonwealth Government created machinery whereby the shipping and marketing of the entire Australian wheat crop were entrusted to a Board of Control representing the Commonwealth and State Governments working in conjunction with a similar Board in London. In the same period the Canadian Government requisitioned a large quantity of grain on behalf of the Allied Governments. In the latter part of 1916 arrangements were concluded for the purchase by His Majesty's Government of 3,500,000 tons of Australian wheat. It was unfortunately not possible to ship more than a portion of this wheat until after the conclusion of the Armistice. Large purchases of Canadian wheat were also made, and the Canadian Government have assisted by refusing permission for any exports of cereals except to Allied destinations. The Canadian Government appointed a Board of Grain Supervisors, with power to fix the prices and allocate supplies. In 1917 His Majesty's Government also purchased the exportable surplus of South African maize, and considerable purchases have been made in respect of the 1918 crop. The distribution of these cereals is in the hands of the Wheat Executive.

*Meat.*—At a very early stage in the war steps were taken both in Australia and in New Zealand to secure for the United Kingdom and the Allies the whole of the available supplies of frozen meat (beef, mutton and lamb). The meat was purchased by the Board of Trade for the supply of the British and Allied armies in the first

place and the civil population of the United Kingdom as regards the surplus. In addition the Admiralty and War Office purchased canned meats in Australia.

*Sugar.*—The Royal Commission on Sugar Supplies made considerable purchases of sugar on behalf of the United Kingdom, France and Italy in Mauritius and the West Indian Colonies.

*Butter, Cheese, etc.*—Large purchases of cheese and butter have been made from time to time. Purchases have been made of the whole of the exportable surplus of cheese of Australia and New Zealand, and purchases have also been made in Canada. His Majesty's Government also purchased the exportable surplus of Australian and New Zealand butter for the 1917-18 season, and negotiations for further purchases have now been completed. The Board of Trade purchased frozen rabbits from Australia, and the War Office purchased a considerable quantity of Australian jam and canned fruits for the use of the troops. The United States Government bought 50,000,000 lbs. of Australian jam for the use of their army. During the last two years His Majesty's Government have bought a large part of the output of Ceylon tea for the use of the United Kingdom.

*Nickel.*—Of the minerals found in the various parts of the British Empire, the most important from the point of view of war material is nickel. The Canadian nickel ore is converted into matte in Canada, but the final process of refining was not, before the war, carried out there, and the matte was sent for treatment either to South Wales or to the plant of the International Nickel Company at New Jersey. In the very earliest months of the war the Canadian Government took steps to secure the disposal of the nickel matte supplied to the International Nickel Company in the best interests of the Allies by the appointment of a Government Controller, with access to the Company's books and premises, and the Canadian nickel purchased by the Ministry of Munitions must have proved of the highest value to the Allies in the prosecution of the war. Steps have now been taken to establish refining plant in Canada.

*Tungsten Ores and Molybdenite.*—One of the most important metals from the point of view of the manufacture of munitions, etc., is tungsten, which is required for the production of high-speed steel. Tungsten ores are found in Australia and the Malay Peninsula (wolfram) and New Zealand (scheelite). In 1915 the Commonwealth Government took over the supplies of wolfram at a standard price, with a view to their being sent to this country to be dealt with by the Ministry of Munitions for the purposes of the United Kingdom and the European Allies; similar action was taken by the New Zealand Government as regards scheelite. The output of the Straits Settlements and Federated Malay States was forwarded direct by producers to this country and on arrival was taken over by the Ministry of Munitions at a price agreed upon between the Ministry and the producers.

The position of Hong Kong as a distributing and transshipping centre for South China enabled His Majesty's Government to secure to some extent the wolfram deposits of China for a similar purpose. Molybdenite, a substitute for tungsten ores, is found in Australia and Canada. The Commonwealth Government took similar action in the case of molybdenite to that taken in the case of wolfram, while purchases of Canadian molybdenite were made by His Majesty's Government and the Allies, and the Canadian Government allowed its exportation only to the United Kingdom and Allied countries.

*Zinc, Copper and Lead.*—Another important Australian metal is spelter. Arrangements were made with the Commonwealth Government in 1916 by which—

(A) During the war His Majesty's Government were to take 100,000 tons of Australian zinc concentrates at the rate of 8,000 tons a month, and might by giving notice take an additional 50,000 tons.

(B) After the war His Majesty's Government were to take up to 45,000 tons of spelter a year and 100,000 tons of zinc concentrates a year for ten years.

This contract was recently revised, and now provides that His Majesty's Government shall buy—

- (a) the greater part of the existing stocks of concentrates and slimes in Australia ;
- (b) the whole exportable surplus from 1st January, 1918, until twelve months after the war up to 250,000 tons per annum ;
- (c) for nine years thereafter the whole exportable surplus up to 300,000 per annum. The prices to be paid throughout the whole period may be regarded as low.

The Ministry of Munitions purchased the whole of the Australian exportable surplus of copper during 1917 and 1918 ; they also purchased all available lead during 1916 and the whole of the Australian output of this metal with certain reservations during 1917 and 1918.

*Tin.*—About 75 per cent. of the world's output of tin is mined and smelted within the British Empire, two-thirds of the output being from the Malay Peninsula. Early in 1915 the Rubber and Tin Exports Committee was set up to control exports of tin and rubber from the Straits Settlements and the Federated Malay States, and under this licensing system the requirements of the British Empire, the European Allies and United States were ensured. The whole of the tin requirements of Italy and about 75 per cent. of French requirements have been supplied by the British Empire. Early in 1918 the desirability of establishing a Central Buying Executive for allied requirements of tin including America was proposed, and came into being during August. On the conclusion of hostilities the Buying Executive was dissolved and restrictions as to exports removed, except to enemy countries.

*Plumbago.*—Plumbago, as a mineral required for lining crucibles and other foundry purposes, is of very great war importance. From 1914 the exportation of plumbago from Ceylon has been prohibited to all foreign countries, and the result was to confine shipments to the United Kingdom and the United States.

*Coal.*—The stringent conditions laid down in the Dominions and the Maritime Colonies as to the supply of bunker coal to neutral vessels have proved of inestimable benefit in securing that the world's shipping should be used in the best interests of the Allies. The Union of South Africa occupies a particularly important position from the bunkering point of view, owing to the number of vessels (warships, transports and vessels engaged on ordinary commercial services) which were compelled by the war situation to use the Cape route, and the Union Government took special steps to ensure that adequate supplies of bunker coal were available for ships using that route, including the stoppage of exports of coal cargoes to foreign countries, or indeed to British destinations, except in cases of urgent necessity where the coal could be supplied without prejudice to bunkering requirements, and also drew up a priority list which ensured that the coal available at any time for bunkering was used in the best interests of the Allied cause. In addition the Union exported coal to other bunkering stations in the East.

*Asbestos.*—Another important mineral product is asbestos. Canada supplies about 80 per cent. of the world's consumption. The Canadian Government by means of a prohibition of exportation secured that the requirements of Allied countries were met, and an organisation was set up to facilitate purchases for the European Allies.

Since the beginning of the war sufficient supplies have been obtained from South Africa to take the place of asbestos received from Russia.

*Wool.*—Of the world's supply of crossbred wool (the variety most suitable for military clothing) about one-half is produced within the British Empire, mainly in New Zealand. Of the supplies of merino (which is ordinarily used for civil purposes, but which it has been necessary also to use for military purposes during the war owing to the shortage of crossbred) about 70 per cent. is produced within the British Empire, chiefly in Australia and the Union of South Africa. During 1915 and 1916 exports of crossbred wool from Australia and New Zealand were confined to the United Kingdom and the European Allies, and, to a very limited extent, to the United States of America, while exports of merino to the United States from Australia and the Union of South Africa were confined to approved firms. In 1916 further measures became necessary, and, as mentioned in previous pages, arrangements were made by which His Majesty's Government purchased the wool clips of Australia and New Zealand at a price of 55 per cent. above pre-war prices.

This arrangement has been renewed annually, and has now been extended to cover the period of the war and one full wool year afterwards. In 1917 His Majesty's Government purchased a substantial portion of the wool available in the Union of South Africa on the same terms.

*Fine Cotton.*—The British Empire produces 94 per cent. of the world's output of fine cotton. This is produced chiefly in Egypt, but some is also produced in the British West Indies. All the West Indian production of fine cotton which was required for aircraft purposes was sent to this country, and measures were taken early in 1918 to obtain control over the whole of the Egyptian cotton crop.

*Flax.*—Owing to the difficulty of obtaining Russian supplies it was found necessary to consider special measures for increasing the production of flax within the British Empire. Both the Canadian and the Commonwealth Governments have made every endeavour to increase the production of those countries.

*Hides.*—The arrangements made at an early stage of the war to send to this country from Australia, New Zealand and the Union of South Africa all surplus hides suitable for military purposes continued in force.

*Rubber.*—Over one-half of the world's production of rubber comes from the British Empire (Ceylon and the Malay Peninsula). From 1914 exports of rubber from these countries were controlled by the Rubber and Tin Exports Committee in London, and as in the case of tin the control was exercised to secure that the British Empire, the European Allies and the United States obtained preference over other consumers. All the rubber required by Italy was supplied from the British Colonies, and the bulk of the requirements of France were met by British rubber.

It may be mentioned that in consequence of the import restrictions which the United States Government were compelled to impose owing to the shipping situation the rubber industry of the Malay Peninsula was very seriously affected.

*Mahogany.*—All the mahogany from British Honduras suitable for aircraft construction was shipped to this country for the use of the Admiralty, which undertook its distribution.

*Spruce.*—Special steps were taken to obtain from British Columbia spruce for aeroplane construction, and very considerable purchases were made through the Imperial Munitions Board. New mills were started, and special arrangements made to supply the necessary labour and facilitate transportation.

*Oleaginous Produce and Glycerine.*—During the first eighteen months of the war the measures taken to control the export of oleaginous produce from British Colonies were devoted to preventing the export of such produce to neutral countries adjoining enemy countries in order to prevent the latter from obtaining such produce. In February, 1916, however, further restrictions were

imposed with a view to retaining for the British Empire and the Allies in Europe the supplies of oleaginous produce available in the British Colonies and Protectorates. In view of the urgent necessity for bringing to the United Kingdom, for the manufacture of glycerine for use as propellants, all the oils and fats, animal and vegetable, which could be secured, the exportation of these articles was prohibited to all destinations other than the United Kingdom or British Possessions and Protectorates, and, so far as licences for the direct export of such articles were granted, they were granted only on the recommendation of the Departments of His Majesty's Government which dealt with the licensing of such exports from the United Kingdom.

At the same time the exportation of all oleaginous nuts, seeds and kernels, including castor beans, copra, cotton seed, ground nuts, linseed and palm kernels was prohibited to all countries other than the United Kingdom, British Possessions and Protectorates, and France, Italy and Russia, except through Baltic ports, thus allowing France and Italy to share in the supplies of oil seeds from the British Colonies and Protectorates so far as tonnage was available to ship them to those countries.

The self-governing Dominions produce little in the way of oils and fats except tallow and whale oil. Exports of tallow from Australia and New Zealand were permitted only on conditions which ensured that the resulting glycerine was placed at the disposal of the British or Allied Governments for war purposes. The whale oil produced in South Africa was either sent to the United Kingdom to be dealt with by the Ministry of Munitions or utilised locally in the manufacture of glycerine for blasting explosives, thus reducing the quantity which had to be supplied from this country.

In addition to these measures, Australia, New Zealand and the Union of South Africa rendered further assistance in increasing the supplies of glycerine available for war purposes. All three Dominions took steps to increase their production and decrease their consumption of glycerine. The Commonwealth and New Zealand Governments prohibited the importation of blasting explosives containing a high percentage of glycerine, and, to assist in increasing production, prohibited the importation of soap. The Commonwealth Government also requisitioned the Australian output of glycerine at a fixed price (much below the world's price), and the glycerine thus secured was shipped either to the United Kingdom to be dealt with by the Ministry of Munitions or to South Africa to be used in the manufacture of the explosives essential for the mining industry, thus reducing the amount which would otherwise have been required from this country.

#### *India.*

This account of the progress of control of Raw Materials in the Oversea Empire cannot be closed without some reference to the

great efforts of India in the cause of the Empire. Serious difficulties were experienced arising out of the shortage of shipping and connected with the financing of exports; but the energies of the Indian Government were particularly concentrated upon providing finance for exports of national importance, and with such good results that the annual value of Indian war exports is estimated to have reached £110,000,000.

Some of the more important commodities are dealt with below very briefly.

In the case of such important articles as jute, saltpetre, mica, shellac, castor seed, opium and tea, India is the sole, or almost the sole, source of supply. During the year 1918 the following quantities of these goods were exported to the United Kingdom, United States and Allied countries:—

Raw jute ... ..	339,000 tons.
Saltpetre .. ...	449,000 cwt.
Mica ... ..	60,000 cwt.
Shellac ... ..	226,000 cwt.
Castor seed ... ..	1,800,000 cwt.
Opium ... ..	3,600 cwt.
Tea ... ..	348,000,000 lbs.

Sandbags and other jute goods are the largest individual item on the list of India's material contributions to the war. The total value of the jute goods exported from India in 1918 was £38,000,000. Practically the whole of these were ultimately used for war purposes or other essential services.

*Wolfram, Chrome and Manganese Ores.*—The vigorous measures taken by the Indian Government to increase the production of wolfram ores have borne fruit, and against a pre-war export of 1,700 tons a year 4,872 tons were exported in 1918 to the United Kingdom at a fixed price for the manufacture of tungsten. Of chrome ore, 13,750 tons (against 1,296 tons in the whole of 1915) were exported. India is practically the only source of supply of manganese ore to this country, and, in addition to supplying 251,000 tons to the United Kingdom, considerable quantities were exported to the Allies.

*Wheat.*—During the same period India supplied wheat to the value of £6,170,000.

*Leather.*—Nearly 70 per cent. of the upper leather required for the manufacture of army boots in the United Kingdom has come from India.

*Oleaginous Produce.*—An Inter-Allied organisation was set up for the supply of oilseeds and vegetable oils, and arrangements have been made for the supply of large quantities of castor-seed, linseed and other oleaginous produce from India at controlled prices.



## CHAPTER XIII.

**FOOD SUPPLY.****A. FOOD PRODUCTION IN THE UNITED KINGDOM.**

It was evident that in the year 1918 every effort would be necessary to increase production and to economise consumption of food. Not only was the submarine menace still undefeated, but the diminishing supply of shipping had to meet a demand for transport which would in 1918 be even more pressing than in 1917. The need of increased food supplies for our Allies, the steady claims of the munitions industries on raw materials from overseas, and the great new factor of the transport to, and maintenance in Europe of, the American Army made it clear that this country must to the utmost of its capacity maintain, and if possible increase, the quantity of home-grown food and thereby economise transport.

The year 1918 saw the culmination of the scheme of food production which had been prepared and brought into operation during the preceding twelve months. It thus marks a direct continuation of the policy which was explained in the War Cabinet Report for 1917. Already in that year a substantial increase had been secured in the amount of home-grown food. In Ireland, where a system of increased tillage had been made compulsory, the returns had shown an additional 648,000 acres under the plough, while in England and Wales there was an increase of 286,000 acres, and in Scotland of 50,000 acres, altogether close on 1 million acres in the area of corn and green crops having been secured.

In 1918 the area of plough land under crops was increased by close on 2 million acres as compared with 1917, and was thus nearly 3 million acres greater than it was in 1916. In Ireland, the increase in 1918 proved to be much less than had been hoped for; nevertheless the area under the plough amounted to 200,000 acres more than in 1917. In Scotland, where the decline in tillage since 1870 had been much less than in England and Ireland, and where there was therefore less suitable tillage land available, the additional area under corn and green crops amounted to 227,000 acres as compared with 1917. In England and Wales an increase was recorded of 1,564,615 acres over the total area in 1917. Thus in the two years, 1917 and 1918, which mark the new policy with regard to food production, the area under tillage crops in England and Wales has been increased by 1,850,000, in Scotland by 276,000 acres, and in Ireland by 840,000 acres. Altogether the tillage area in the United Kingdom has been increased in the two years, 1916-1918, by 2,966,000 acres.

This increase took place mainly in the three staple food crops of the United Kingdom—wheat, oats and potatoes. In

wheat there was an increase in 1917 over 1916 of 50,000 acres, and in 1918 over 1917 of 690,000 acres, a total increase in 1916-1918 of 740,000 acres; in oats an increase in 1917 over 1916 of 616,000 acres, and in 1918 over 1917 of 850,000 acres, a total increase in 1916-1918 of 1,466,000 acres; in potatoes an increase in 1917 over 1916 of 220,000 acres, and in 1918 over 1917 of 124,000 acres, a total increase in 1916-1918 of 344,000 acres. The efforts of the farmers have thus been successfully directed to increasing the area of the most important food crops.

Fortunately, in 1918, not only was there a great increase in the acreage of crops, but the yield was above average and in many parts abundant. Owing to the unfavourable weather in the later weeks of harvest, delay and damage to crops ensued, but even allowing for this, the country's harvest as a whole was very good. Taking the United Kingdom average, the yields per acre of each of the corn crops was not only above that of 1917, but was better than the average of the preceding ten years, wheat being estimated at 33·3 bushels in 1918 as compared with 30·8 in 1917, barley 33·8 bushels as compared with 32·00 bushels in 1917, and oats 44·5 bushels as compared with 43·70 in 1917. The increased acreage of these crops together with the high average yield gave a considerably greater total produce than in 1917, the increase amounting in wheat to 3,600,000 quarters, in barley to 586,000 quarters, and in oats to 5,176,000 quarters. There was also a very good potato crop, the yield per acre being above the average of the ten preceding years and only slightly lower than the remarkable crop of 1917. Owing to the increased acreage, the total yield of the potato crop was estimated at 9,223,000 tons as compared with 8,604,000 tons in 1917.

The increase in the produce of the four main food crops, wheat, barley, oats and potatoes, can now be summarised :—

—			1918.	1916.	Increase over 1916.
			Quarters.	Quarters.	Quarters.
Wheat	...	...	11,643,000	7,471,884	4,171,126
Barley	...	...	7,768,000	6,612,550	1,157,450
Oats	...	...	31,196,000	21,333,782	9,863,218
			Tons.	Tons.	Tons.
Potatoes	...	...	9,223,000	5,468,881	3,754,119

The following reports refer to the conditions, methods and results of the food production campaign respectively in England and Wales, Scotland and Ireland.

#### ENGLAND AND WALES.

The Government's programme for increasing the area under the plough in England and Wales for the 1918 harvest by 2,000,000 acres as compared with the area for 1916 was described in the

Report of the Department for the year 1917. It was there explained also that the additional supplies of labour, machinery and horses which were required to enable this task to be carried out had not been forthcoming by the close of the year. In view of the food situation, however, the Department decided that an attempt must be made to secure as large a proportion of the land originally aimed at as possible, and the Agricultural Executive Committees were instructed to continue scheduling land for ploughing. Concurrently the local organisation throughout the country was developed and improved so as to be in readiness to make the best use of additional labour or other improvements in the situation. Fortunately the early months of 1918 brought ideal ploughing weather, with the result that farmers with their own resources, assisted to a limited extent by supplies placed at their disposal by the Department through the Agricultural Executive Committees, achieved a substantial part of the task which they had been asked to undertake.

As the main object in view was to increase the area of corn and potatoes as food crops, the official returns of the area in England and Wales under these crops in June, 1918, showing the increase over 1916, are of special interest :--

**ACREAGE OF CORN AND POTATOES IN  
ENGLAND AND WALES IN 1918.**

Crop.	1918.	Increase on 1916.	Percentage Increase.	Remarks.
	Acres.	Acres.		
Wheat ... ..	2,557,000	645,000	34%	Highest recorded since 1884.
Barley ... ..	1,501,000	169,000	13%	
Oats ... ..	2,780,000	695,000	33%	Highest on record by 21%.
Mixed Corn ... ..	142,000	141,000	—	Included in previous years under wheat, barley and oats.
Beans and Peas ... ..	401,000	52,000	15%	
Potatoes ... ..	634,000	206,000	48%	Highest on record by 25%.
<b>Total acreage of Corn and Potatoes.</b>	<b>8,015,000</b>	<b>1,908,000</b>	<b>29%</b>	

There was also a substantial increase in the acreage under rye ; but as in former years a considerable part of the rye crop was consumed by sheep in the green state, it is not possible to ascertain the extra area under grain in 1918. The total area under rye in 1918 was 101,000 acres as compared with 55,000 in 1916, and as in the later year nearly all was saved for grain, it is likely that the total increase in the corn area was from 50,000 to 75,000 acres more than is shown in the above table.

Against the increase in the acreage of corn must be put a decrease of approximately 77,000 acres, to a small extent in the area of roots, but chiefly of other green crops. The total net increase in England and Wales under corn and green crops, excluding land under rotation grasses and bare fallow, amounted in 1916-1918 to approximately 1,830,000 acres.

The very favourable weather of early spring was followed by a dry and cold period in the end of April and May during which all corn crops and especially late sown oats and wheat suffered severely. Wireworm, as is always the case when these weather conditions prevail, did much damage, and a second pest—the leather jacket—was unusually abundant. In some districts crops on the newly broken grass land were destroyed and many of them were damaged. Fortunately, in June the weather again was favourable, the partially damaged corn recovered and before harvest the general view of agriculturists was that no such promising crops had been seen in the country since 1868. The greater part of the fine cereal crop of the South was secured in perfect condition, but when the weather broke at the beginning of September most of the corn in other parts of the country was still in the fields. The weather of September and October was the worst for harvesting operations, but in the end difficulties were surmounted and by far the greater part of the crop was secured in reasonably good condition. The “winning” of the harvest of 1918 in the foul weather of the autumn was, from the agricultural standpoint, an even greater achievement than the ploughing and seeding of so many extra acres in the fair weather of the spring, for not only were harvesting conditions at their worst, but the great crops had to be gathered in without the aid of a large percentage of the farmer’s regular staff.

In a small proportion of cases, unfortunately, crops were totally lost; no exact estimate of this loss can be framed, but it probably represented less than 5 per cent. of the grain crop. A special estimate of the losses in the case of wheat and barley was made by the Crop Reporters of the Board of Agriculture, and this pointed to the conclusion that 7 per cent. of the wheat crop would be unfit for milling and 15½ per cent. of the barley unfit for brewing. The greater part of the damaged grain would, of course, be suitable for feeding live stock. The figures in the table below refer to grain crops actually secured.

The unfortunate harvest experience, like the damage done by insects in spring, called forth criticism of the Food Production policy. Attention was drawn to sprouting grain and flooded corn-fields, and it was argued that if the meat which might have been produced from the ploughed up pasture were taken into account, the nation stood to gain little by the 1918 cultivation programme. It will be desirable, therefore, to supplement the figures in the above

statement with estimates of the total production of corn crops and potatoes in England and Wales so that the real position may be cleared up. The following figures are based on the usual returns from Crop Reporters, sent in on November 1st, and published by the Board of Agriculture and Fisheries in the middle of the month. The cereal crops of 1916 were somewhat under average; the statement, therefore, includes figures for the ten-year period before the war. No account has been taken of the production of rye grain since comparable figures are not available. Mixed corn, shown separately in 1918, was included mainly under barley and oats in previous years.

PRODUCTION OF GRAIN AND POTATOES IN  
ENGLAND AND WALES.

—	1918.	1916.	1904-13.	Increase.		Percentage of Increase.	
				Over 1916.	Over 1904-13.	Over 1916.	Over 1904-13.
	(Thousands of Quarters.)					%	%
Wheat ...	10,534	6,835	6,653	3,699	3,881	54	58
Barley ...	6,085	5,181	6,212	904	-127	17	-2
Oats ...	14,336	10,411	10,572	3,925	3,764	38	36
Mixed Corn ...	620	—	—	620	620	—	—
Beans and Peas	1,328	1,122	1,529	206	-201	18	-13
Total ...	32,903	23,549	24,966	9,354	7,937	40	32
	(Thousands of Tons.)						
Potatoes ...	4,209	2,505	2,643	1,704	1,566	68	59

The figures are remarkable in showing how great the resources were which until 1916 were allowed to lie latent in British land. In spite of the limitations imposed by war, wheat was increased by 58 per cent. and oats by 36 per cent. over the yield of the pre-war period; while potatoes were increased by no less than 59 per cent. The weight of grain produced was increased from 4,300,000 tons in 1916 to 6,000,000 tons in 1918 or about 40 per cent.

The production of straw in 1918 may be estimated to have been some 2,000,000 tons over the average; on the other hand there was a drop of about 1,350,000 tons of hay, of nearly 3,000,000 tons of roots, and of the produce of some 1,200,000 acres of pasture as compared with 1916.

Assuming the losses in fodders to be converted into their equivalent in beef, the total loss may have been as much as 90,000 to 110,000 tons of meat; but after making this allowance for possible losses the net gain of human food was very great.

If the bulky potato crop were replaced by its equivalent in grain, it may be shown that even then the 1918 crops represent a gain in shipping space of some 2,600,000 tons (40 cubic feet) as compared with the period of 1904-13.

### **Programme for 1919.**

In view of the military situation in the early spring of 1918 and of the urgent need for saving tonnage, a programme was prepared for 1919 which involved the breaking up of a further area of about 1,000,000 acres of grass land with the object of providing not only breadstuffs and potatoes, but also more feeding-stuffs for animals. It was then obvious that if the war continued the provision of concentrated foods for livestock would become increasingly difficult.

When, in May, it became known that a further withdrawal of the farmers' skilled men for military service was necessary, it was recognised that this programme must be modified; and late in the summer when the powers of the Agricultural Executive Committees were limited by the amendments introduced into the Corn Production Act, a further change in the programme for 1919 was decided upon. The attention of Agricultural Executive Committees was, therefore, directed to the second main feature of the programme drafted in the spring of the year, viz., to the improvement of the cultivation of existing tillage land, and they were informed that until the labour situation substantially improved the resources at the farmers' disposal could, with more advantage to the country, be employed on the existing arable land than on an extension of the tillage area.

- The desirability of this policy was confirmed by the wet weather of September and October. Until the end of September a marked improvement, as compared with 1917, could be noted in the cultivation of tillage land throughout the country, but the rain which delayed the harvest also injured the condition of arable land by promoting the growth of weeds and preventing autumn tillage; thus in the last months of the year farm work fell greatly into arrears. This circumstance, and the signing of the Armistice, so far modified the outlook that at the end of the year the Department decided not to press for the ploughing of additional grass land except on those farms on which it was clear that an extension of the tillage area would not prejudice the cultivation of existing arable land.

### **Local Organisation.**

The Agricultural Executive Committees, which were established in each county early in 1917, were principally occupied during the early months of 1918 in completing the survey and scheduling of grass land suitable for arable cultivation, issuing orders for the ploughing of the areas selected, and assisting farmers to carry out

the Department's programme. It is estimated that not less than 100,000 notices were served on occupiers by Executive Committees requiring them to plough up grass land and cultivate it for the harvest of 1918. The great majority of these notices were carried out willingly by the farmers, but prosecutions for default have had to be instituted in 254 cases, the result of which has been reported; in 236 of these cases convictions were obtained and fines imposed.

The Committees continued their work of grading up cultivation, and for this purpose during 1918 took possession, under the Defence of the Realm Regulations, of badly farmed land, comprising a total area of 27,287 acres, and arranged for its proper cultivation, or farmed it themselves. The Board of Agriculture also, on the recommendation of Executive Committees, determined or authorised landlords to determine, the tenancies of 317 occupiers farming 20,197½ acres. In a much larger number of cases it was not necessary to take possession of land or to determine the tenancy, but improvements in cultivation were carried out by the occupiers under the direction of the Executive Committees.

### **Land Drainage.**

Schemes of land drainage were carried out or put in hand dealing with 150,000 acres, German prisoners being largely employed on the work. It is estimated that not less than 1,000,000 acres in England and Wales are unfit for cultivation owing to defective drainage, and many of the defects can be remedied if the channels of the streams and rivers are cleared and the banks repaired by manual labour, without the necessity of carrying out large engineering works. The Land Drainage Act, 1918, enables the Board to deal with the matter far more effectively than in the past. The passing of this Act, the active work done by many of the Agricultural Executive Committees, and the exceptionally heavy rainfall of the autumn and early winter have combined to create a considerable interest in this question particularly in the Northern and Eastern counties as well as in Wales. As a result of this movement, applications were received during the year for the establishment of drainage authorities (among other areas) for the main rivers of Yorkshire, for the Clwyd, the Dee, the tributaries of the Thames in Berkshire and Surrey, the Welland, and (from the Councils of five out of six counties on its course) for the Great Ouse.

### **Organisation of Agricultural Executive Committees.**

During 1918 the organisation and staff of the Agricultural Executive Committees were revised and strengthened. The organisation varies slightly to meet local needs, but normally consists now of a County Agricultural Executive Committee with Sub-Committees dealing with the various branches of the work, such as Survey, Cultivation, Labour, Supplies, Horticulture and Finance.

The staff includes a Chief Executive Officer to take general control of the other officials of the Committee and co-ordinate all branches of the work, and a District Executive Officer for each district of the county, who deals with the whole of the Committee's work within that district. During 1918 the control of the Government tractors, and the responsibility on the one hand for the supply of recruits for the Army from agriculture, and on the other hand for the protection of agriculturists who were not to be called up for military service, were placed upon the Committees.

### **Supply of Labour.**

As a result of the German offensive in the spring and the imperative needs of the Army for reinforcements, the War Cabinet decided that 30,000 Grade I men between the ages of 18 and 31 were to be recruited from agriculture for military service before June 30th. At the same time the whole of the agricultural labour was placed in a "ring fence" under the control of the Agricultural Executive Committees. It was decided that whatever demands should be made upon agriculture for the Army were to be transmitted to the Committees, who would be responsible for selecting the men to make up the quota from their counties. The protection granted to agricultural labour was extended to men in its necessary allied trades, such as men employed with steam ploughing tackle, agricultural blacksmiths, etc.

In the middle of June it was apparent that it was impossible to find 30,000 Grade I agriculturists for military service unless a large part of the harvest were to be sacrificed. The War Cabinet, therefore, decided on the 26th June that no more calling up notices were to be issued to agriculturists until after harvest. The number of men actually posted to the Colours under the quota system was 22,654. On the conclusion of harvest, in view of the extreme shortage of labour on farms, no further demand for men for military service was made from the agricultural industry in England to complete the full number of 30,000 originally required. Agricultural Executive Committees continued, however, to release for the Army all the men they considered could be spared.

So far as numbers were concerned the men taken from agriculture were replaced by further prisoners of war, low category soldiers, women, war agricultural volunteers and others, but owing to the fact that those released were almost all skilled agricultural labourers, while the substitutes supplied were for the most part unskilled, the loss to agriculture remained appreciable right up to the close of the year. The urgent demand was for skilled ploughmen, and it was difficult to meet this demand, as few such men have been available. 4,000 unskilled soldiers were trained as ploughmen, and 4,093 soldiers were trained in tractor driving and ploughing. To assist with the ingathering of the harvest, arrangements were made for the War Office to supply 10,000 soldiers and 5,000 extra prisoners on loan. The services of many thousands of public schoolboys and women were also utilised.



*Prisoner Labour.*—The demand for prisoners of war continued to grow throughout the period under report, and experience showed that they were of the greatest assistance. Numerous camps were established during February and March, in each of which batches of 25 to 40 prisoners were housed and made available to assist farmers in the neighbourhood. Arrangements were also made with the War Office by which farmers who could accommodate prisoners on their own premises, and were willing to be responsible for them, could obtain one to three such men without guard, provided their applications were approved by the County Agricultural Executive Committee.

*War Agricultural Volunteers.*—In May a scheme was issued for the enrolment of suitable men as War Agricultural Volunteers for work on the land. Any man who had already attained the age of 45 years on the date of his application for enrolment could be enrolled, irrespective of his position as regards military service. Men who had not attained the age of 45 on the date of their application for enrolment could be enrolled if they proved they were in medical categories B3, C3, or Grade III, or were not liable for military service. This scheme made available for agriculture a number of men who by reason of their age or medical category were more likely to be useful on farms than with the Colours. Many of the men who volunteered were gardeners, or had had experience of farm work in their earlier days. Altogether 3,904 of these volunteers were placed out at work on farms.

*Women Workers.*—The employment of women in agriculture made considerable progress during the year. The number of village women employed part or whole-time on the land is estimated to have been about 90,000 before the war; at the beginning of 1918 it had risen to 260,000; at the end of September to at least 300,000. Early in the year, owing to the withdrawal of men for the Army, it became urgent to enlist further whole-time workers in the Women's Land Army to take their place, and an active recruiting campaign was carried out by the Women's Branch of the Department. As a result about 9,000 additional women were selected, trained, equipped and placed in employment. The largest number of these women employed at any time of the year was 16,000 at the end of September.

*Summary.*—The following summary shows the amount of labour supplied by the Department during the year :—

	Number on farms on 1st Jan., 1918.	Number on farms at end of year.	Increase.
Soldiers ... ..	41,361	72,247	30,886
Land Army Women ...	5,758	11,529	5,771
Prisoners of War ...	5,934	30,405	24,471
War Agricultural Volunteers	—	3,904	3,904
Other labour... ..	200	430	230
	53,253	118,515	65,262

On the cessation of hostilities early in November, the labour position became more satisfactory, although the unfavourable weather conditions were retarding the work on the farms. Recruiting for the Army ceased, and the Military Authorities commenced to release on agricultural furlough soldiers at home who were experienced in farm work, and for whose services employers made application. On the other hand, the War Agricultural Volunteers quickly returned to their pre-war employment. A total of 30,000 men was allotted to agriculture under the scheme for the release of a limited number of "pivotal" men in industry in advance of general demobilisation. The task of collecting the names of the men whose early release under this scheme was recommended was undertaken by the Board working through the agency of the County Agricultural Executive Committees.

### **Tractor and Horse Cultivation.**

At the beginning of 1918, 1,600 Government tractors were being worked by the Agricultural Executive Committees. From that time the tractors manufactured in America by the Ford Company were delivered in large numbers, and at the end of the year the number at the disposal of the Committees was 4,200, although a considerable number of the less suitable tractors first used had been withdrawn and sold. During the year 650,000 acres were ploughed by the State-owned tractors, and 580,000 acres were cultivated. The possession of these tractors has enabled the Agricultural Executive Committees to ensure that when Orders were served on farmers for ploughing up grassland, the means were at hand for carrying out the work. In addition, the capabilities of tractors were demonstrated, with the result that a further 3,000 were released from supplies ordered by the Department for sale to farmers.

The arrangements made in 1917 for the fullest possible use of all the steam ploughing tackle in the country were continued, and during the year 1918 250,000 acres were ploughed, 880,000 acres were cultivated and 23,000 acres mole-drained by this means. Sixty-six sets of new tackle were also manufactured through the Ministry of Munitions, and sold to steam tackle contractors.

The number of horses employed by the Agricultural Executive Committees for assisting farmers to break up grassland increased from 4,600 at the beginning of the year to a maximum of 10,000 in December, when it was decided to sell all mares in foal, and certain other horses on loan to farmers. Horses were hired to farmers or sent out with skilled ploughmen and implements. German prisoner ploughmen camps were also equipped with horses, harness and implements.

*Harvest Machinery.*—The supply of machinery available in the country for harvesting and threshing was likely to prove in-

adequate to deal with the largely increased acreage under corn crops. The Food Production Department, therefore, arranged for the manufacture of additional binders, and as a result during the harvest operated or hired to farmers 4,250 binders, and released an additional 524 for sale. The binders operated by the Department reaped 200,000 acres and were of material assistance in getting in the harvest. 438 threshing machines were manufactured, 360 remaining the property of the Department, and the operations of the threshing machines in private ownership have been organised in such a way that threshing tackle should be available throughout the country.

### **Agricultural Supplies.**

*Fertilisers.*—The arrangements made by the Ministry of Munitions and the Food Production Department in 1918 in regard to the supply of the principal fertilisers worked very satisfactorily. The total output was on the whole in excess of the pre-war production, but the increased area under cultivation and the high prices of crops resulted in a large demand which was not fully satisfied. In order to ensure the best distribution in the interests of food production with a minimum of railway transport, an Order was issued fixing prices and introducing a system of licensing, the effect of which was to require farmers to use, as far as possible, fertilisers produced locally. As the aggregate quantity of fertilisers sent by rail in Great Britain amounts to appreciably over a million tons, there was an opportunity for an effective saving in transport. The arrangements for distribution proved quite successful and it was found possible to despatch the fertilisers from the works as they were made without undue pressure on the railways. With the termination of hostilities, the supply improved, and it is expected that it will be possible to meet the whole of the demand in the spring of 1919.

*Seed Supplies.*—The Department supplied 8,700 quarters of selected seed wheat in 1918. The greater portion of this was applied for by farmers in England and Wales, who were thus enabled to sow pure stocks of the newer varieties of wheat. A portion of the total was shipped for sowing in France.

A shortage of seed oats in the spring of 1918 was anticipated on account of the poor oat harvest of 1917. The Department, therefore, purchased and sold to farmers in England and Wales 29,700 quarters of Irish, Scotch and Manx seed. The Department also bought and distributed 32,800 tons of seed potatoes. Of this amount 22,000 was distributed to small growers and allotment holders, 9,200 to the British Expeditionary Force in France and Salonica, and 1,600 tons to Allied Countries. Of the 22,000 tons, 13,000 tons were varieties immune from wart disease for planting in districts infected with the disease. To provide increased supplies of certain less common immune seed potatoes for planting in

1919, 700 acres of resistant varieties were grown. In connection with the inspection of growing crops of immune varieties, the Board's staff inspected approximately 4,000 acres, of which about 75 per cent. were found suitable for certification.

Small supplies of maize and of pure stocks of selected varieties of wheat were also distributed.

### **Allotments and Horticulture.**

*Allotments.*—During the calendar year 1918 an additional 13,196 acres, or 184,800 allotments, were provided. The total number of allotments in England and Wales has increased during the War from 570,000 to over 1,400,000.

*Marketing.*—The difficulty experienced by the small cultivator in finding a market for his surplus produce, led to the formation of a Marketing Section, and as the result of its work Marketing Societies have been registered in 30 counties, and other arrangements for the disposal of surplus produce have been made in 12 counties. During the year these organisations established 35 central depots, 590 sub-depots, 59 local stalls and markets and 18 auction markets.

### **SCOTLAND.**

The District Agricultural Executive Committees, which were appointed to assist the Board of Agriculture for Scotland in securing increased cultivation, and to whose work reference was made in the Report of the War Cabinet for 1917, continued and extended their labours in 1918. The object in view was to obtain as large an increase as possible in the area devoted to growing crops used for human food. A complete survey of all holdings in Scotland was carried out by the Committees in order to ascertain where increase was possible, and to ensure that additional areas should be ploughed. As a result in large measure of the efforts of the Committees the total area in Scotland under grain, green crops, etc., amounted in 1918 to 2,100,000 acres, showing an increase as compared with 1917 of 227,000 acres, and as compared with 1916 of 276,000 acres. The chief items in the increase over 1917 cultivation were 202,000 acres of oats, 21,800 acres of potatoes and 18,300 acres of wheat. These results were attained through the voluntary co-operation of the farmers and the Committees and in face of serious difficulties occasioned by the depletion of farm staffs and the shortage of fertilisers. The number of holdings in Scotland exceeding five acres in extent is approximately 60,000, and only in 170 cases was it found necessary for the Board to exercise their compulsory powers in order to secure the increased cultivation desired.

With regard to the yield of crops in wheat, oats and potatoes, the three crops in which there was an increased acreage, the yield

proved about the average of the last ten years ; in barley the yield was average, and in roots and hay the yields were below-average — particularly in the case of roots.

The total produce of wheat increased from 304,169 quarters in 1917 to 402,000 quarters in 1918 ; there was a slight decrease of 28,000 quarters in barley ; but in oats, in which the yield proved much larger than was expected (41·5 bushels per acre), being nearly equal to the 1917 record yield of 41·85 bushels, the total produce increased from 5,446,931 quarters in 1917 to 6,457,000 quarters in 1918. In potatoes the yield per acre was 6·8 tons as compared with 7·51 tons in 1917 ; but the total produce amounted to 1,156,000 tons as compared with 1,110,085 tons in 1917, and marks the highest record output of potatoes in Scotland. It is worthy of note that the acreage of corn crops and potatoes in Scotland in 1918 exceeded the acreage of these crops in the year 1872 by 76,000 acres, or 4·8 per cent.

### Supply of Labour.

The number of men to be withdrawn from agriculture in Scotland to meet the needs of the Army for reinforcements after the German offensive in the spring was fixed at 5,500. Of these, 4,000 were men born in the years 1895 to 1899, who were called up under the Royal Proclamation of 20th April, 1918. The remaining 1,500 were taken, under the decertifying Order made by the Director General of National Service on 28th May, 1918, from men born in the years 1886 to 1894, and they were selected by a Committee composed of representatives of the District Agricultural Executive Committees and local representatives of the Ministry of National Service. Scotland was not materially affected by the cancellation of calling-up notices issued after 26th June, as the whole quota had already received calling-up notices, and the posting of the men to the colours was completed by 14th August.

For spring cultivation about 3,500 skilled men and 2,500 unskilled men were released by the Army Council, in addition to the men already in the Agricultural Companies. For the grain harvest it was estimated that 15,000 additional hands were required, and that about 5,000 might be obtained from civilian sources. The Army Council were therefore asked by the Secretary for Scotland to release 10,000 soldiers for this purpose, and this request was ultimately granted. The harvest proved a tedious one, and the soldiers gave invaluable help. Crofters serving in the Navy and Army were also given leave at the discretion of their Commanding Officers.

For potato-lifting the services of school children were largely utilised, and about 600 German prisoners were successfully employed in Perthshire and Forfarshire, while for autumn cultivation it was arranged that 2,500 skilled men should be released

from the Army for two months from 15th October, and by the middle of November over 1,400 of these had been placed on farms.

Altogether at various seasons the services of some 25,000 soldiers have been made available.

Arrangements were made with the Ministry of National Service and the Ministry of Labour for the enrolment of War Agricultural Volunteers in Scotland, but this scheme met with comparatively small response.

Under the scheme for the early demobilisation of pivotal men, the Board of Agriculture for Scotland acted as Central Authority for agriculture and the allied industries (including forestry) in Scotland. The number of men for whom the Ministry of Labour had agreed at 31st December, 1918, to accept applications was 4,250, and at that date the Board had forwarded lists of about 4,000 men, selected by the District Agricultural Executive Committees.

### **Machinery.**

To assist in the carrying through of the programme of increased cultivation a large supply of agricultural machinery was obtained by the Board and put at the disposal of farmers under the supervision of the District Agricultural Committees. These included 196 tractors, 223 ploughs, 47 cultivators, 85 grubbers, 49 disc harrows and 203 binders. The result of the season's working with tractors was that some 17,000 acres were ploughed, 2,500 acres cultivated, 5,000 acres grubbed, and 4,300 acres harrowed.

In some districts where the land was found to be unsuitable for tractor work horses were supplied by the Board together with ploughs and other equipment, and in addition arrangements were made with the Remounts Department of the War Office under which a number of Army Horses were hired to farmers during the spring months.

### **Fertilisers.**

During the early part of 1918 the distribution and terms of sale of fertilisers were not definitely controlled by the Government. But on 1st May, 1918, the Fertiliser Prices Order came into force for the regulation of sales and purchases of superphosphate, sulphate of ammonia and ground basic slag.

The Ministry of Munitions who issued the Order delegated to the three Departments of Agriculture jointly the administration of the scheme of control. A Fertilisers Allocation Joint Committee was appointed containing two representatives of the Board of Agriculture for Scotland. To assist them in the administration of the scheme of control, so far as Scotland was concerned, the Board set up Advisory Committees consisting mostly of representatives of the Fertilisers trade.

*Sulphate of Ammonia.*—Owing to the demands of the Ministry of Munitions, the supply of sulphate of ammonia for agricultural purposes was strictly limited, and a system of rationing was found to be necessary. The total quantity available for the year ending 31st May, 1919, was estimated to be 200,000 tons. Scotland's quota, originally fixed at 40,000 tons, was provisionally raised to 60,000 tons, roughly the quantity used in Scotland during season 1917. Of this quantity it is estimated that about 30,000 tons were supplied by the end of 1918. The reduction in the demands of the Ministry of Munitions consequent on the cessation of hostilities has to be discounted to some extent by the need for fertilisers in the restored areas of France and Belgium and the restriction of output in this country owing to the scarcity of fuel. The demand for sulphate of ammonia in Scotland still greatly exceeds the supply available.

*Superphosphate.*—The position with regard to the supply of superphosphate was not so serious. The output continued to be affected by the demands of the Ministry of Munitions for sulphuric acid and the scarcity of tonnage for the importation of phosphate rock. But in spite of these adverse factors, the demand for superphosphate has so far been fairly well met.

*Basic Slag.*—The lack of the necessary labour and grinding machinery militated against an adequate output of basic slag. Increased quantities were, however, obtained from Scottish works, and on the whole the shortage of this fertiliser has not been serious. Scotland's quota for the year ending 31st May, 1919, is estimated at about 70,000 tons, of which nearly 15,000 tons have been supplied from English works. Licences for over 50,000 tons have already been issued.

*Potash.*—During 1918 efforts continued to be made to develop native stores of potash. Considerable supplies were obtained from blast furnace flue dust, produced at English works, and arrangements were made for a quantity proportionate to the increased acreage under cultivation to be supplied to Scotland for application to the potato and flax crops.

During the year a new source of supply was exploited by the British Potash Company, Limited, Oldbury, who began to manufacture limited quantities of Muriate of Potash. Arrangements were made whereby the Scottish Board of Agriculture received a proportionate supply for allocation to fertiliser manufacturers and farmers in Scotland.

### Allotments.

*Defence of the Realm Regulation 2 L.*—So far as at present ascertained, the number of allotments formed in Scotland during the war is about 42,000 extending to an area of 2,400 acres. In seven cases the Board by compulsory order gave Town Councils power to enter on land for the formation of allotments. Town Councils have also themselves cultivated, or have arranged for the cultivation of, over 800 acres of land.

### Grazing of Deer Forests.

*Defence of the Realm Regulation 2 M.*—Under this Regulation the Board entered on parts of 7 different deer forests and let the areas entered on in all cases for grazing purposes. The total acreage in these 7 cases is roughly 29,150, and the total number of stock which it is estimated will eventually be grazed is 5,264 sheep and 218 head of cattle.

In the case of parts of three other deer forests grazing schemes were undertaken to the satisfaction of the Board. Considerable areas of suitable grazing land were also made available to applicants as the result of the Board's intervention.

Under the same regulation land for fairly large arable allotments was provided in 3 cases in congested areas.

### IRELAND.

The procedure adopted in Ireland to maintain food production has been a continuation of the policy of 1917. The measures may be broadly classified as follows :—

- (1) The exercise of compulsory powers to maintain and secure a further increase in the area of land under the plough.
- (2) Special propaganda work in addition to, and in extension of, the Department's ordinary schemes of agricultural instruction.
- (3) Securing for farmers the requisites essential to the successful cultivation of the land, *e.g.*, machinery, artificial manures, feeding stuffs, etc.

(1) In 1917 an Order under D.O.R.A. required holders of 10 acres and over of cultivable land to cultivate 10 per cent. of their arable land in addition to what they cultivated in 1916, subject to a maximum of 50 per cent. of the arable area. The 1918 Order, which was made under the Corn Production Act, required, subject to certain exceptions, occupiers of less than 200 acres of arable land to cultivate 15 per cent. of their holdings in addition to the area cultivated in 1916. Occupiers of not less than 200 acres of arable land were required to cultivate an additional 5 per cent., *i.e.*, 20 per cent. in addition to the 1916 area.

These Orders necessitated extensive and careful surveys to determine the portion of each holding which could be economically cultivated and also for the purpose of giving exemption in the case of land required for milk production, as well as for other purposes such as accommodation for export of stock and for certain industrial requirements. In this manner, while generally enforcing increased tillage, it was possible to avoid any hardships that might arise from the application of a general Order.



In the case of defaulters the measures relied upon by the Department for securing compliance with the Order were mainly that of entering upon the lands—which of itself frequently had the effect of inducing the occupier to proceed with the tillage—and, in the last resort, to let the necessary proportion of the land to neighbouring farmers or others for cropping.

(2) In order to enlist the co-operation of farmers in the work of food production by impressing on them the urgent need for it, the special propaganda work of the previous year was continued. The operation of the ordinary educational schemes was largely suspended so that all the local officers might concentrate their attention upon stimulating the tillage work. Extensive series of lectures were held in country towns and villages. Visits were paid to farmers for the purpose of inducing them to make special efforts to secure the maximum production of crops, and to inform them as to how the necessary requisites could be obtained and as to the prices which the Government had undertaken to pay for their produce. In this way, and by the circulation of numerous leaflets, by articles and advertisements in the press, and by enlisting the co-operation of the press itself as well as of the clergy, teachers of primary schools, merchants and the police in rural districts, the needs of the situation were kept fully before agriculturists.

In all their propaganda and educational work the Department had the unstinted support and co-operation of the Statutory County Committees of Agriculture, who assigned their entire staffs and organisation to the encouragement of food production. To realise the amount and value of work performed by those Committees, it has to be remembered that in Ireland there are proportionately far more holdings than in Great Britain, that facilities for travelling and for disseminating information are not nearly so great, and that the difficulty of bringing home to occupiers in remote districts knowledge of what is required of them is greater than in other parts of the United Kingdom.

(3) As in 1917 the Irish Department of Agriculture co-operated closely with the two Boards in Great Britain in regard to the supply of the necessary tillage requisites, agricultural machinery, manures, feeding stuffs, etc.

Notwithstanding the extreme difficulties experienced in getting full supplies for the United Kingdom, supplies to the Irish farmer were on the whole fairly well maintained. An understanding which was loyally carried out was come to between the three Boards of Agriculture as to the division of the various fertilisers, and, while the average import of fertilisers into Ireland for the years 1912 and 1913 amounted to 202,000 tons, the average for 1917 and 1918 was only 177,000 tons. Having regard to the additional acreage to be manured it was obvious that there was a

serious shortage which was naturally reflected in the amount of the produce, but farmers were induced to accept the situation and to apply the fertilisers available to crops which would yield the largest quantity of food and for which manure was most required.

The Agricultural Machinery Branch of the Ministry of Munitions gave much assistance to the Irish Department in making available raw materials for the manufacture of implements in Ireland and in facilitating the allocation to Ireland of supplies of British and foreign made implements and machinery.

The Food Production Department too rendered Ireland considerable assistance in allocating a number of tractors. In September, 1918, some 640 tractors were at work in Ireland as compared with 70 at the beginning of the previous year. Many of these tractors were worked by men specially trained by the Irish Department for the purpose.

Of special value to the small cultivators in Ireland were the facilities provided for obtaining loans for the purchase of farm machinery and implements. The value of the requisites so purchased in 1918 amounted to £110,000.

Food production in Ireland suffered serious disability owing to the restrictions and difficulties of transport from Great Britain of agricultural requisites. The export of produce from Ireland was similarly handicapped. But after the appointment of a Director of Cross Channel Transportation everything possible was done to make the most advantageous use of the shipping available.

In addition to the food production on farms, cultivation of allotments by town dwellers was also encouraged. The additional quantity of food so secured was important, though small when compared with that produced on farms. Where necessary the Department availed itself of the compulsory powers at its disposal to provide land in districts where it could not be secured voluntarily.

The main results of the special efforts to increase the area under crops in Ireland can be seen in the following summary of the acreage in 1916, 1917, and 1918.

—	1916.	1917.	1918.	Increase in 1916-1918.
	Acres.	Acres.	Acres.	Acres.
Corn Crops ... ..	1,305,851	1,774,227	1,932,793	626,942
Potatoes ... ..	586,308	709,263	701,847	115,539
Other Green Crops ...	401,148	429,650	442,997	41,849
Flax ... ..	91,454	107,705	143,355	51,901
Total ...	2,384,761	3,020,845	3,220,992	836,231

Taken together with an increase of over 3,000 acres in the area under fruit, the increase in the area of ploughed land under crops

in Ireland as compared with 1916 amounted to nearly 840,000 acres. It is also worthy of note that in Ireland the area under hay in 1918 while less than in 1917 was 64,000 acres greater than in 1916. The cropped area accordingly in 1918 exceeded that of 1916 by 900,000 acres.

The increased produce of the main food crop in Ireland is indicated by the following summary.

—				1916.	1917.	1918.	Increase in 1916-1918.
				Quarters.	Quarters.	Quarters.	Quarters.
Wheat	...	...	...	353,000	572,000	711,000	358,000
Barley	...	...	...	784,000	945,000	1,003,000	219,000
Oats	...	...	...	6,395,000	9,709,000	10,400,000	4,005,000
				Tons.	Tons.	Tons.	Tons.
Potatoes	...	...	...	2,433,000	4,153,000	3,863,000	1,430,000

In considering these results it must be borne in mind that Ireland is primarily a country for the raising of live stock, and is indeed the nursery of cattle for the United Kingdom. Accordingly it was essential to bear in mind the need for preserving the balance between the area under tillage and that under grazing in view of the scarcity of meat and the reliance placed upon Ireland for this product.

As the numbers of live stock normally fluctuate from year to year, the manner in which Irish live stock has been maintained is best illustrated by comparing the averages of the returns for 1912 and 1913 with those for 1917 and 1918. (The years 1912 and 1913 are taken instead of 1913 and 1914 in order to eliminate the effect of Foot and Mouth Disease in 1914.)

				Average 1912 and 1913.	Average 1917 and 1918.
Cattle	...	...	...	4,891,000	4,886,000
Sheep	...	...	...	3,725,000	3,686,000

In the case of pigs there was a reduction in the annual average from 1,192,000 for the years 1912 and 1913 to 961,000 for the years 1917 and 1918. Owing to the partial failure of the potato crop in 1916 the numbers of pigs in Ireland fell seriously in 1917, but the loss is being made good.

The average annual export of these animals during the same period was as follows :—

				Average 1912 and 1913.	Average 1917 and 1918.
Cattle	...	...	...	832,000	804,000
Sheep	...	...	...	639,000	689,000
Pigs	...	...	...	233,000	185,000

These figures must be kept in mind in considering the export of the surplus crops to Great Britain. The production of live stock is now as in previous years the primary industry of rural Ireland. The extent to which flocks and herds were maintained in Ireland before the war was, in a large measure, due to the importation annually of some 800,000 tons of feeding stuffs from abroad. After the outbreak of war the Irish agriculturist was confronted with the problem of how to maintain his stock in face of the great reduction in this import, which fell from an average for 1912-13 of 786,000 tons to an average for 1917-18 of 252,000 tons, or a reduction of more than two-thirds.

To maintain the stock, therefore, it was necessary to draw more largely upon the produce of home grown crops, even at the sacrifice of a corresponding area of grass, and the natural consequence was to reduce the exportable surplus of oats and potatoes. Notwithstanding this, however, there was a considerable increase in the net exports in the last two years, as the following table will show :—

			Average 1912 and 1913. Tons.		Average 1917 and 1918. Tons.
Oats	...	...	44,000	...	64,000
Potatoes	...	...	140,000	...	225,000

Turning to the secondary agricultural products, the following shows the average exports from Ireland in the two years prior to the war and in the past two years :—

			Average 1912 and 1913. Cwts.		Average 1917 and 1918. Cwts.
Butter, cheese, condensed milk and margarine	...	...	852,000	...	882,000
Eggs	...	...	1,108,000	...	1,404,000

These figures show that in addition to supplying her own needs, Ireland was able to increase largely her export to Great Britain.

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In considering the foregoing results which were achieved in the direct work of an immediate increase in food production, it should also be borne in mind that a great deal of work was done by all the Departments of Agriculture to advance research, to improve the protection of crops and live stock against disease, to improve methods of testing and selecting of seeds, to develop the organisation and education of women in relation to agriculture and horticulture through women's institutes, and to make provision for land settlement and training in the period after the war.

## B. CONTROL OF FOOD.

### **The Food Situation at the beginning of the year.**

The year opened at the height of a crisis in the history of the changing food conditions of this country.

The disturbing forces which had come to operate in the country's food supply began to make themselves acutely felt in the last three months of 1917 when successive shortages appeared in several important commodities (apart from sugar which had been in short supply for many months), all connected directly or indirectly with the shipping difficulty. The earliest in date was the tea shortage which began to be felt in September and October, due to the prohibition of the import of tea in February, 1917, and the consequent exhaustion of stocks. This was a tonnage difficulty pure and simple. A little later in the year bacon became scarce partly owing to the lack of feeding-stuffs for pigs and partly to the practical cessation of imports from Europe and their reduction from other countries. At the same time, the imports of butter and margarine were exceedingly low, and though the home production of margarine was rapidly increasing under stimulus from the Ministry the new industry could not undertake at once the entire supply. Finally, the end of December witnessed the appearance of a meat shortage whose causes were more complex than in any of the other cases. Imports of meat, which had been mainly drawn from Australasia and South America, had almost ceased except for army purposes, and the Army Purchase Scheme, which proposed to transfer part of the army consumption also to home livestock, had increased the demand, already far above the normal. The uncertainty as to import of feeding-stuffs and the descending scale of prices introduced by the Army Purchase Scheme and then extended, combined with these main causes to produce a heavy drain upon the livestock between October and December, culminating in an unprecedentedly high slaughter rate just before Christmas, which practically exhausted the cattle ready, or nearly ready, for slaughter. The beginning of January therefore saw an acute shortage of beef and, after a week or two of large marketing of sheep, a like shortage of mutton. The visible result of these shortages in important articles of food was the immediate appearance of large queues outside the retail shops, at first here and there, for tea and bacon, then from the beginning of December more and more generally, for butter and margarine and finally for meat. The weather was bitterly cold and the hardships aroused general discontent and resentment.

The one alleviating feature of the situation was the limitation of the prices of the essential foods; it is hardly possible indeed to guess to what figures these might have risen at this time in the absence of control. But this control had removed the one factor which normally plays a part in times of shortage by reducing demand until the market progressively rights itself. The appearance of queues was therefore quite inevitable and the only way out of the difficulty was to ration out the inadequate

supplies among the whole population, a step which had been in contemplation at a much earlier date and which Lord Rhondda had since then advocated on grounds of general policy.

### **Organised Distribution and Rationing.**

Local Bodies with which the Food Controller could deal had been created in August, 1917, when Food Control Committees had been appointed under Order by the local authorities throughout Great Britain. At the same time, 15 commissioners were appointed, each to represent the Food Controller in a Division comprising a number of Counties. The elements of any administrative machinery which subsequent events might prove necessary were therefore ready for use when they were required.

The first rationing experiment was made in sugar in the later months of 1917 but its close relation to other schemes adopted later makes it necessary to review its main features. It was a very great advantage in the urgent difficulties of January and February that most of the details and the alternative possibilities had been given a practical trial in easier conditions. The scheme was at first suggested upon the basis of registration of the household with the retailer, but ultimately it was settled upon the individual basis on account of the difficulties in connection with the floating population. The most striking feature of the scheme was the centralised system of control which aimed at the formation of a single register for the whole population of Great Britain and the distribution of the ration documents from the Ministry of Food in London. Each member of the public held either a Sugar Card or a Ration Paper and sugar coupons. The card gave the right to draw a fixed ration from the retailer named on the card; the ration paper was an identification certificate traceable in the Central Register and enabled the holder to obtain coupons at any Post Office for use with any retailer. These papers were issued on every case of removal and it was contemplated that eventually the whole population would be brought under the latter system.

When the shortages of meat and fats to which reference has already been made became evident in December, 1917, the Food Controller issued an Order by which he empowered the Food Control Committees to adopt, subject to the consent of the Food Controller, local schemes for the control within their respective districts of the retail distribution of any specified article of food. The essential features required in each scheme were: (1) the registration of customers with retailers of each foodstuff rationed; (2) the fair division by the retailer of his supplies among his customers; (3) the regulating of the number of customers registered with each retailer. Before the issue of the Order several towns were preparing local rationing schemes for butter and margarine and provisional sanction was given at an early date to many others, particularly in industrial areas. In many cases the Food Control Committee's district was found to be an

inconveniently small unit and the formation of group area schemes was carried out under the supervision of the Divisional Commissioners. Among the more important group areas for which schemes were submitted early in the year were South West Midlands with Birmingham as the centre; Tyneside with Newcastle as the centre; Cleveland district with Middlesbrough as the centre; and North East Derbyshire with Chesterfield as the centre. Every scheme included butter and margarine in the foodstuffs to be rationed; other articles proposed to be included by particular districts were tea, meat, bacon, cheese and lard. Many of the schemes were initiated upon the household basis as this could more rapidly be brought into operation, but the individual basis was ultimately felt to be more satisfactory.

The case of the London area was more complicated than that of any other. On February 4th a meeting of Executive Officers of Food Control Committees in the London and Home Counties Area was convened by the Commissioners to deal with the butter and margarine queues in the London district, and by a large majority the meeting decided in favour of a unified scheme to be prepared by the Ministry of Food. As the meat shortage grew more serious it was decided to include the rationing of meat in the scheme. Two individual cards were issued, one a Food Card for the rationing primarily of butter and margarine, but which could be used for other articles if necessary; the other a Meat Card with four detachable coupons for each week, three of which were available on a money value for butcher's meat and the fourth, or all, for other kinds of meat on a weight basis. For butcher's meat and for butter and margarine the customer was registered with the retailer. Many difficulties were experienced in the preparation of the scheme. A complete code of instructions for establishments of all kinds was worked out and has survived in its essential features throughout the country. The scheme came into force on February 25th and operated from the first without serious difficulty; its effect on the abolition of queues was instantaneous.

The meat shortage was now a matter of primary concern. Meat did not lend itself readily to local control, being largely a home-produced article produced in some areas and not in others, and a general system of control through all stages of distribution was being rapidly set in operation. Towards the end of February Lord Rhondda decided that meat should be rationed nationally on the basis adopted for London and the Home Counties. This scheme was successfully launched on April 7th. the general position as regards rationing at this date being as follows :—

- (1) Certain Divisions had adopted in its entirety the London model for butter and margarine and for meat.
- (2) A large group of industrial areas, particularly in the North of England, were rationing butter and margarine on their own system, many of them on the household basis.

- (3) A number of areas existed, mainly agricultural, in which butter and margarine were not rationed.

The registration of customers was on May 5th extended to bacon (which up till then had been rationed without registration), and consumers were required to register with a bacon retailer. It was decided that supplementary rations of meat ought to be granted to heavy workers and that those should take the form of bacon, and a central committee was appointed which divided the workers eligible into three grades: D. Heavy workers; E. Agricultural workers; F. Very Heavy workers. A supplementary ration was also given to boys between 13 and 18. In July a two-thirds majority of the Food Control Committees voted in favour of retaining supplementary rations under the national scheme but when bacon was released from the ration in August, it was decided to suspend them.

From July 13th the whole country was brought under a unified rationing system for meat of all kinds, butter and margarine, sugar and lard, with registration for tea, the distribution arrangements having then reached a completeness which made this possible. In the contemplation of general rationing it had been clear from the first that it must be based upon one of two fundamentally opposed principles: the sugar scheme was an experiment in one of them, the local schemes for meat and fats in the other. It was urged, on the one hand, that no scheme could be watertight which did not involve the central registration of the whole population and the issue of a document in the form of an identification certificate; on the other, that it would be preferable to create local registers, to issue documents upon applications scrutinised locally and rely on a fairly frequent re-issue to keep registers up to date. Experience of the meat and fats scheme as compared with the sugar scheme led to the adoption of local control and registration with the retailer upon which the meat rationing scheme and later the national system was therefore based.

Any system of rationing, whether local or central, rests in the end upon a system of organised distribution. The more acute the shortage, the more essential was the efficiency of the distribution plan of which individual rationing was only the final stage. Strict control of the stages of distribution was the only measure which could in any degree compensate for the absence of an adequate margin of stock, and in a sense it was the inevitable sequel to the control of prices at all stages.

Schemes for the distribution of various commodities were in process of creation from the summer of 1917, although the control of certain imports of butter and cheese had been exercised by the Board of Trade at an earlier date. The problems in connection with the distribution of imported foodstuffs were very much simpler than those presented by home production, and a plan was evolved which was applied first to sugar by the Sugar Commission, then to imported butter, cheese, bacon, and tea, of which the essence consisted in the tying of retailer to wholesaler



and of wholesaler to importer, either one or a limited number of suppliers in each case, on the basis of actual business during a chosen period known as the datum period. This plan had the merit of preserving the normal channels of trade and was therefore comparatively easy to bring into operation, although it presented certain great difficulties, which had also been raised by certain of the price Orders, as to the continued existence of smaller wholesalers who intervene between the primary wholesaler and the retailer and are especially necessary for maintaining supplies to small shops. A solution of this difficulty was achieved in the case of both bacon and tea by the establishment of a pool upon which the secondary or distributing wholesaler could draw without the necessity of receiving his profit virtually out of the profits of the wholesaler or the retailer with whom he dealt. Control to this extent was made possible only by other developments, to be noticed later, by which Government buying took the place of private buying in the world's markets. The weakness of the datum period system of distribution was of course that it made no allowance for changes in population or other alterations since the period taken. It was therefore gradually combined in the case of rationed articles with a system by which not the datum period but the requirements of each retailer for his registered customers were the basis of his supplies.

The scheme for the distribution of margarine fell into a class by itself. Although mainly concerned with a home-produced article, the raw materials were imported and the production was a factory business of recent growth and in comparatively few hands, and the whole system partook of the relative simplicity of an importation scheme. The distribution was under an executive Board elected by the trade and other interests concerned and it controlled distribution to the area of each Food Control Committee or group of Food Control Committees with a joint officer, who distributed to registered wholesalers and retailers.

The problem of the distribution of meat, on the other hand, was one of extraordinary complexity, partly because of the unprecedented strain thrown upon home supplies by the reduction of imports, partly because of the complicated causes tending to diminish production and partly because of the great variations normally existing in the meat trade. The process of standardising and using existing channels could not be carried out with the directness and comparative simplicity possible when an import trade is the main consideration. The system consisted of two main parts: (a) a territorial organisation for the control of livestock; (b) an organisation of the meat trade for the regulation of distribution. The initial stages of the process were marked by the registration of auctioneers, cattle dealers, butchers and slaughterhouse keepers and by the fixing of maximum prices, first for meat and later, under a grading system, for fat cattle and sheep. The grading system has not been entirely satisfactory and the adoption of the alternative, sale by dead weight at a Government slaughterhouse, has gradually overcome the

dislike felt for it by the farmers. The essential unit was the area consisting of one or more counties under a Livestock Commissioner and the pivot of the system was the Area Meat Agent, working with the Commissioner and with a representative Area Meat Distribution Committee, who was notified of the requirements of the districts and arranged for their supply either in cattle or in dead meat. The retailer was allowed to buy only upon a permit, but, in a number of cases, a Butchers' Committee was formed for the Food Control Committee's district which bought for the district on a single permit. As far as possible the Commissioner's area had to be supplied from its own livestock.

Under the new scheme for butter distribution, which came into force on October 14th, a somewhat similar amalgamation of the control of the article, whether imported or home produced, was applied. Territorial divisions were created and for each area a branch dépôt was fixed from which supplies could be issued to the area, thus effecting a very considerable saving in transport. Arrangements were made in the registration of retailers to ensure that local supplies should be taken into account before supplies of Government butter were allocated to any area.

The rationing of foodstuffs is ultimately a measure for ensuring a definite standard of economy in their use, and mention may be made here of certain other measures of economy which have been prominent during the past year.

The rationing of the staple food, bread, was successfully avoided and economy in the use of wheat was secured in other ways by the milling of wheat to a higher extraction of flour, by increasing the admixture of other cereals and, to a certain extent, by importing flour instead of wheat, thus saving a considerable percentage of shipping space.

A conspicuous place was taken by the development of National Kitchens and later in the year by the kindred organisation of National Restaurants. A scheme was formulated for the whole country and an officer specially responsible for National Kitchens appointed for the area of each Divisional Commissioner. A particularly large number of successful enterprises sprang up in Yorkshire and the Midlands, and the courage of many Local Authorities was stimulated by the great success of the attempts of others.

Mention must be made also of the measures which were taken with regard to ships' stores and the efforts made side by side with these, to secure that all available space on any ship should be used for small or large packages of food. Surplus ships' stores were taken over by the Ministry of Food, and shipping requirements had priority in the allocation of the stock thus accumulated. As a result of the control established the export of considerable quantities of food to neutral countries under the

guise of ships' stores was prevented. At the same time, valuable work was done, with the co-operation of the owners and masters of ships, in putting packages of food in available spaces on board where cargo is not usually carried.

### **Inter-Allied Food Control.**

Meantime, while internal adjustments were being made and schemes brought into a concrete form for home supplies and distribution, other difficulties were developing which called for a more complete inter-allied system of organisation than already existed. The Italian withdrawal in the autumn of 1917 and the enemy success on the western front in the spring of 1918 had aggravated the food difficulties of our Allies, who had lost not only large stores of provisions, but many districts from which considerable crops were anticipated. Not only so, but the cumulative losses incurred during the submarine campaign were telling heavily on tonnage. In another way, too, these losses were forcing on a change. In order to economise tonnage the need for shortening voyages was increasingly felt and hence North America was becoming the chief market in which the Allies could buy. Fortunately the Government of the United States had realised the position in time and were prepared to render assistance both in goods and by loans to the causes which they recognised as common to themselves and their European Allies. It was not the supply of the United Kingdom which was endangered as much as the supply of the Allies as a body. As described in the Report for 1917, systems of common purchase were already in existence, but these had to be developed and further machinery had to be devised whereby supplies should be not only purchased but determined in common accord and divided out with due regard to the needs of the various countries.

Just at this time when there was so much that called for rare administrative experience this country was deprived of the services of Lord Rhondda.

While this is not the place to attempt an estimate of Lord Rhondda's success, this much must be said. He saved the country from grave difficulty and disorder by his resolute control of prices and by the confidence he inspired. Few probably, except those who worked under him, are aware of his many varied qualities and of the devotion with which he applied them to his task. A fine balance of judgment harmonised with a readiness to accept responsibility and to make decisions. He worked strenuously himself and was well served by his staff because he was generous of the loyalty which he expected from others. It is true of him that his interest and influence were felt in every branch of the huge organisation over which he presided.

The appointment of Mr. Clynes as Food Controller in Lord Rhondda's place was received with general satisfaction. From the first he had identified himself with the general policy of

control and had been singularly successful in securing the consent of the House of Commons to the measures and actions of the Ministry. The institution of the Consumers' Council, which was directly due to him, had done much to meet criticism on the part of both the public and the Press.

Later in the year administrative changes occurred. Mr. Wintour who had been chief Secretary since July, 1917, resigned and became Controller of the Stationery Office. Sir John Beale, previously vice-Chairman of the Wheat Commission, was appointed in his place.

The first duty which confronted the new Food Controller shortly after his accession to office was to co-operate with the Food Controllers of France, Italy, and the United States in the formation of an Inter-Allied Body which should give unity to the food policies and programmes of the European countries, represent their common food needs to the United States, which, as has been pointed out, had become the most important source of supply, and secure the equitable distribution of the goods thus obtained. The foundation of some such system had been already laid by the institution of the Wheat Executive and the Meat and Fats Executive which in their respective spheres, aimed at co-operative action between the countries concerned. Moreover, a unified system of common purchase, as described in a previous report, was already in operation; it owed much of its efficiency to the arrangements made both during and as a result of Lord Reading's mission to the United States. On another side, too, progress had been achieved. In December, 1917, an Inter-Allied Scientific Commission was appointed for the purpose of examining the food necessities of the various countries with due reference to the actual nutriment afforded by the various foods and required by the different peoples. As a basis it worked upon the data furnished to it by the statistical departments of the respective Ministries. As will be seen the problem was not so much to introduce a new system as to centralise and unify the different agencies actually at work. The result of Mr. Hoover's visit to Europe in the summer and of the conference which took place between him and the other Food Controllers, aided by their chief officers, was the formation of an Inter-Allied Food Council, which consisted of the Controllers themselves. The active administrative body, however, is to be found in the Committee of Representatives, which has offices of its own and meets in constant session. The Wheat Executive and the Meat and Fats Executive still carry out their former executive work and in addition do much in the way of co-ordinating the requirements of the various countries before these are reported to the Committee.

### **The Food Situation in the Autumn.**

Despite certain symptoms of possible difficulty, the prospects before the country in the summer were not on the whole unfavourable. The crops promised well and the number of the livestock

had been maintained quite up to expectation. On the other hand, the low rate of importation during the year had been a constant cause of anxiety, and the stocks of feeding stuffs, partly because of the large import of flour instead of grain, and partly also because of a deficiency in cake, were undoubtedly low. Still the programme of requirements as prepared made provision for a supply which, though low, would meet the more pressing needs. Again, while some rises in price had been anticipated it was not expected that these would be great. Unfortunately several factors combined to put a different aspect upon the future. The disasters which happened in other countries had seriously interfered with their home production and our own harvest, owing to a continuance of wet weather, though a fair average, was by no means as good as had been hoped. The rate of consumption in this country rose to a higher level than in the summer and autumn of 1917. But the decisive factor was the paramount requirements of the transport of American troops and munitions which made so heavy a call upon shipping space. As a consequence a drastic cut in tonnage was made by the Allied Maritime Transport Council amounting, in the case of the foodstuffs of this country, to no less than 3,000,000 tons. It was a choice between troops with munitions and food imports, and the decision was of course in favour of the former; but this led up to a further choice. With the position of stocks and probable supplies as it was, it was decided that feeding stuffs must give place to direct human food. Following on this, the inability of the United States to supply the quantity of oil cake arranged for came as a grave disappointment. The scarcity of feeding stuffs thus produced did not, it must be borne in mind, affect the winter meat supply alone, it threatened the milk supply. Fortunately the organisation of the meat and livestock sections of the Ministry was so highly developed that action which would have been impracticable in the previous winter was possible. Arrangements were made to feed some part of the home army on home meat and to store the refrigerated meat which would otherwise have passed into consumption; means were taken for discriminating between grass fed cattle according to the possibility or not of yard feeding; and appeals were made to the patriotism and intelligence of the farmers through the various agricultural organisations associated with the Ministry. Moreover, the scheme of milk distribution which had been long under consideration was nearer completion and by this means it was hoped to secure a more even distribution and to minimise waste or uneconomical use.

Owing to the various causes, amongst which are included the increased cost of production and the necessity of buying an unusually large proportion of imported foodstuffs in markets with a high level of price, new advances in the prices of foodstuffs occurred between July and October. As several articles of primary importance, such as meat, milk, butter, margarine, cheese and eggs, were affected, the renewal of the upward movement occasioned considerable complaint. To some extent the

rise was regarded as due to the tonnage difficulty and as such was viewed as inevitable.

To meet the difficult position arising out of the events and changes enumerated above, new measures were brought into force. Jam was added to the ration; the price of eggs was brought under control, and a reduction arranged for in the price of margarine. Furthermore it became necessary to reconsider the rate of extraction and dilution in the case of flour, in order to increase the quantity of wheat offals and barley for cattle food. The system of costing was revised with a view to repressing profiteering. Schemes were introduced also with the object of regulating the distribution of potatoes and milk.

The Potato Scheme was so devised that, while interfering as little as possible with ordinary trade operations, the State guarantee that the crop would be taken off the hands of the farmers should be honoured, and that at the same time transport should be ensured and price restricted. Later in the year certain modifications of the scheme proved necessary in practice. The aim of the milk scheme was to secure the economical distribution of the milk supply, especially in view of the wants of large industrial centres, to prevent local scarcities, and to preclude the need for rises in price. Here again it was proposed to employ whilst controlling the trade agencies.

### **The Armistice: Relaxation of Control.**

The preceding paragraphs give an outline of the conditions prevailing when the Armistice was concluded. During the two succeeding months they were modified to a very considerable extent, both as a direct and as an indirect result of the cessation of hostilities.

The direct effect of the changed situation was, of course, principally and almost immediately felt in accessions to the tonnage available for food imports. This followed from the increased safety of the seas, from the release of ships which would otherwise have carried American troops and Army supplies, and from the restoration of interned tonnage; and a consequent relief to the food position in this country was felt almost at once. The chief anxiety, as has been shown, was for cattle feeding-stuffs, for the maintenance of the milk supply and of breeding stock in the first place, and for fattening purposes in the second place. Large imports of oil-cake were, unfortunately, not immediately possible as supplies were not available in America, but large imports of wheat made it possible instead to lower the extraction rate of flour and to decrease the dilution of wheat with other cereals, thus setting free a large quantity of grain and millers' offals for animal food. The Damaged Grain Order was at the same time withdrawn. With the prospects of imports of oilcake in the early months of 1919, this effected a great improvement in the situation, especially by restoring the sense of security in the maintenance of the livestock and by protecting the milk supply: and the

large imports of meat which became possible at the same time saved the country from the necessity of making inroads upon its livestock in order to maintain the meat ration.

No time was lost in removing as rapidly as possible the many minor disabilities which in some respects had been felt to be peculiarly irksome. Tonnage was now available for the import of fresh fruit and other less essential articles which had lately been extremely scarce. A general licence, issued by the Board of Trade for three months, rendered possible the import of a number of articles on private account which had for some time been prohibited. Apples, bananas, nuts, coffee, raw cocoa and other foodstuffs were among these. Taking advantage of good stocks and prospects, lard was released from the ration, and it was announced that any reasonable quantity of tea might be bought, although the registration system was maintained for distribution purposes. A double ration of butchers' meat and an extra ration of sugar were announced for Christmas week, and poultry and game were for that period released from the coupon, a concession which was afterwards made permanent. Edible meat offals had already been set free, and pork was removed after the revocation of the Pigs (Sales) Order. The manufacture of cake and pastries was authorised, and the restriction upon the amount which could be consumed between 3 and 5.30 p.m. in a catering establishment withdrawn. It was announced that the rations of sugar and of margarine would be increased early in 1919.

Two diverging currents of opinion were almost immediately visible : the desire to return as rapidly as possible to normal conditions of trade, and the desire to consolidate whatever had been gained by the State organisation of supply and distribution. The commercial world naturally looked forward with impatience to the relaxation of control, while large sections of the public, represented within the Ministry by the Consumers' Council, were equally anxious not to lose the protection given to the consumer by State control until other conditions were sufficiently normal to render it unnecessary. In a certain number of cases of secondary importance it was possible to restore the play of competition at an early date : the general licence issued for the importation of certain articles has already been mentioned, and the re-opening of the export trade in tea involved the sale of tea in a free market for export only. The general action of the Ministry was, however, determined by factors quite outside its own control and inherent in the conditions prevalent not in this country and its supplying markets only but also in the whole continent of Europe. It was manifest from the first conclusion of the Armistice that the revictualling both of the devastated territories now recovered, and also of the Central Empires themselves, must devolve upon the Allies ; and the vast scope of the work thus undertaken compelled the maintenance of the power to use and direct shipping and supplies for some time to come. Officers of the Ministry were despatched soon after the Armistice to investigate and report upon the actual conditions in the needy areas,

and in the early days of 1919 the Inter-Allied Supreme Council of Supply and Relief was set up in Paris to create and control the whole relief organisation.

### **Administrative Organisation.**

Questions of general policy have since September been considered by the Food Council at which the Food Controller presides. There are two Boards dealing with Imports and with Home Supplies, presided over by the Secretary and the Second Secretary respectively.

(A) *Central Organisation.*—The Central Organisation of the Ministry of Food falls into two main parts—the Secretarial Branches, working immediately under the Secretary and Second Secretary, and the Supply Divisions responsible for various food-stuffs, each under an Assistant Secretary.

1. *Supply Divisions.*—The Ministry was divided from the first under the headings of the different classes of foods, and the boundaries of the divisions have been readjusted from time to time according to circumstances. Throughout the earlier part of 1918 they were as follows:—(i) Meat, Milk, Fats and Feeding-stuffs; (ii) Fish, Fruit and Vegetables; (iii) Provisions and Miscellaneous Foodstuffs. The first-named division was in September separated into two dealing with Meat, Oilseeds and Feeding Stuffs, and with Dairy Produce respectively, and the last named into two dealing with Bacon and Miscellaneous Provisions. Each division comprised sections dealing with the supply and distribution of special articles. In matters concerned with rationing they worked in close touch with a division of somewhat different character which is responsible for all relations with Local Authorities.

2. *Secretarial Branches.*—The work of the Supply Divisions and their Sections was co-ordinated by the branches of the Secretary's Department each for its special aspect of the Ministry's work. The branches as in working from January to August were: Shipping, Legal, Statistical, External Relations, Publicity and General Storage, and the Establishment Branch which controlled headquarters and provisional staff and other kindred matters. In addition to the heads of the Branches named above, a number of special officers were appointed in advisory or other capacities and attached to the Secretary's Department. Two Scientific Advisers and two Agricultural Advisers were among these, and their number also included the Chief Engineer, an officer for Parliamentary Business, and Liaison Officers with the American Food Administrator, with the Food Control Committee for Ireland, and with the War Office. A Financial Secretary was appointed and a Finance Division organised as part of the Secretary's Department with representatives in each of the Supply Divisions.

The Branch dealing with Transport, Labour and Materials was originally associated with the Local Authorities Division and was later transferred to the General Storage Branch of the Secretary's



Department. Ultimately a Road Transport Board was appointed as a department of the Board of Trade, representative of all Government departments concerned including the Ministry of Food.

3. *Trade and other Committees and Boards.*—A considerable part has been played in the work of the Supply Divisions by various Committees and Boards. These may be placed in two distinct classes :—

- (i) Executive.
- (ii) Advisory.

(i) Executive functions were handed over to committees of persons not actually officers of the Ministry of Food in certain specific cases. The Board of the Margarine Clearing House and the Bacon Board may be taken as examples.

(ii) Advisory committees worked in connection with almost every section of the supply divisions and they may be regarded as a permanent application of the principle which led Lord Rhondda from the first to confer with representatives of the trade interests concerned. The Committees were generally presided over by the officer at the head of the Section concerned, and met from time to time as business arose. In addition to these sectional advisory committees and to the conferences which were called from time to time, for example, of wholesale grocers, there were certain advisory bodies whose scope was more general.

The Agricultural Advisory Committee was formed in May, 1918, as a body representative of all the chief agricultural interests. In July a reorganisation was effected by which the Committee was transformed into the Central Agricultural Advisory Council representing and advising the Boards of Agriculture for England and Scotland and the Department of Agriculture and Technical Instruction for Ireland as well as the Ministry of Food.

The Consumers' Council was set up in January, and consisted of representatives of the Parliamentary Committees of the Trade Union and the Co-operative Congress, the National War Emergency Committee and the Women's Industrial Union, with co-opted members to represent unorganised consumers.

4. *Central Control of Local Authorities.*—The officers under the control of the Local Authorities' Division were the intermediaries in the matter of distribution between the Local Food Control Committees and all Supply Branches, excepting only as regards meat distribution, which branch had a provincial staff of its own. The Local Authorities' Division consisted of :—

- (i) A sub-division in Administrative Control of Local Food Control Committees and Food Commissioners and their staffs.
- (ii) A sub-division controlling the administration of the Rationing Orders.

The Division is in constant touch not only with the Commissioners, but also with all Local Food Control Committees.

5. *Statistical Organisation.*—The statistical work of the Ministry is of two kinds—that required to give a view of the food position as a whole and for purposes of general policy, and that needed for immediate action by the respective departments. The main statistical organisation, including the tabulation and preparation of the large general returns of stocks, supplies, issues and consumption, is centred in the Statistical Branch, while the detailed administrative work is performed by departmental sections working in co-operation. Information is obtained every month as to the stocks of all kinds of grain and the places where it is stored, and every week as to the stocks of meat and provisions in cold stores and warehouses; the variation in the quantity of flour used by bakers and sold by retail is known monthly, and the number of animals slaughtered is known weekly; and there are other returns smaller in scope but equally essential. Regular summaries are sent forward showing the respective supplies, the estimated future stocks and the actual weekly consumption of the chief foods.

(B) *Local Organisation.*—The whole administrative plan of the food organisation depends upon the principle of decentralisation, and its unit is the Local Food Control Committee, working in touch with the Divisional Commissioner, to whom is devolved much of the detailed guidance which cannot be satisfactorily done from headquarters.

1. *Divisional Staff.*—The staff originally appointed to assist Food Commissioners consisted in the first instance of a varying number of Assistant Commissioners, of whom 31 were appointed during 1917. Associated with these were inspectors, accountants and officers, dealing with the distribution of various commodities, with transport, military exemptions and propaganda. More recent orders made necessary the appointment of a number of Fish Distribution Officers and of Grain Officers, and in connection with Milk and Potato Orders. The original staff of 31 has been increased.

2. *Local Control Committees.*—The whole work of the rationing and distribution of food rests upon the broad basis of the Local Food Control Committees in every district in the country. The enormous mass of detail which makes up their work cannot be effectually summarised, but it is implied in all that has already been said as to rationing. Food Control Committees were appointed by the Local Authority for the area of each borough, urban district and rural district under an order of August, 1917. Considerable changes were made in their constitution during 1918. During the latter part of 1917 and the early months of 1918 there was some agitation against their constitution, chiefly on the ground of the inadequate representation of Labour, Women and the Co-operative Movement. It was, therefore, decided to sanction increases in the membership of Committees above the statutory limit of twelve laid down by the Order.

Provision was also made to meet an administrative need by facilitating the amalgamation of Committee's districts where

this was desirable and the appointment of a joint Food Control Committee.

3. *Meat Distribution Organisation.*—A special organisation was set up for the control of the livestock and meat trades. Auctioneers, cattle dealers, butchers and slaughterhouse keepers are now employed as agents of the Ministry of Food at fixed salaries or rates or margins of profit, and private dealings have been swept away. The livestock trade is controlled by tying both buyers and sellers to particular markets, and the link between the organised buyers and the markets is the Area Meat Agent, an official whose business is to supervise the allocation of meat to traders in accordance with their requirements.

4. *Food Control Machinery in Ireland.*—Food control in Ireland differs in important ways from the system in Great Britain, the difference being roughly of two kinds :—

(i) The absence of many restrictions in distribution and of some in price which exist in Great Britain.

(ii) The existence of special restrictions upon the export, and in the case of bacon, upon the import also of certain foods. The machinery of control is much less complicated than in Great Britain. The central authority is the Food Control Committee for Ireland, appointed by a minute of August 31st, 1917, which holds the same powers as regards Ireland as have been assigned by an Order of the Food Controller affecting local authorities in Great Britain, and it may establish Sub-Committees at its discretion, but this establishment is not made compulsory.

The following particulars illustrate the magnitude of the work of the Ministry.

The expenditure by the Ministry in the purchase of food-stuffs (apart from administrative expenses), including that incurred by the Sugar Commission and the Wheat Commission, amounts to 630 millions a year, or, if the purchases by the Wheat Commission on behalf of France, Italy and Greece be deducted, to about 520 millions.

The staff of the Ministry at Headquarters consisted in November, 1917, of 1,450 persons; in January, 1919, the number had become 4,570. The staff in provincial offices (not including Local Food Offices) altered between the same dates from 500 to 4,031 persons. The total number employed on the 1st January, 1919, was, therefore, 8,601.

### **Effect of Control on Stocks and Prices.**

Though much of the work of the Ministry can only be described in general terms, some portion can be illustrated by statistical tables. This is true in particular of the maintenance of stocks and the control of prices.

(a) *Stocks*.—In the early months of the war the importance of maintaining stocks on a high level was perceived, and returns of stocks were called for in respect of certain leading commodities. From the middle of 1917 these returns were extended, with the result that all principal articles are now included. In normal times, when supplies are regular and drawn from wide areas subject to varying seasonal conditions, large stocks are unnecessary. The reverse is the case when imports cannot be anticipated with certainty and when their source is restricted to one group of countries. Hence the importance during the war of maintaining and building up stock which forms, as it were, the pivot of the whole system of supply.

#### STOCKS OF THE PRINCIPAL FOODS IN THE UNITED KINGDOM.

Commodity.	Thousand Tons.					
	1916.	1917.		1918.		1919.
	1st Sept.	1st Jan.	1st Sept.	1st Jan.	1st Sept.	1st Jan.
Wheat (incl. flour) ...	2,599	1,815	3,290	2,117	3,408	2,910
Rice ... ..	71	60	88	120	207	140
Meat ... ..	34	62	66	87	79	137
Bacon and Hams ...	38	27	29	9	94	46
Fats ... ..	31	17	48	7	42	43
Sugar ... ..	137	108	181	197	424	382
Tea ... ..	43	58	21	17	45	65

(b) The effect of the policy of Price Control can best be shown in the tables illustrating respectively the rise in the price of food as compared with other articles in the United Kingdom and the rise in the price of certain foods in the United Kingdom and certain other countries.

#### RISE IN PRICE OF FOODS AND OTHER NECESSARY ARTICLES.

—	July, 1914	July, 1917	Oct., 1917	July, 1918	Oct., 1918	Average monthly increase between	
						July, 1914 and July, 1917	July, 1917 and Oct., 1918
Principal controlled foods	100	205	194	202	216	2·92	0·73
All principal foods	100	203	198	213	229	2·87	1·73
Textiles, leather, etc.	100	234	245	294	313	3·72	5·27
Coal ... ..	100	135	135	163	177	0·97	2·80
Soap ... ..	100	133	150	233	233	0·92	6·67
Candles ... ..	100	184	184	329	348	2·33	10·93
Household Oils	100	215	286	319	319	3·20	6·93

The above Table shows that the prices of the principal controlled foods have advanced less, and if the last fifteen months be taken much less, than those of other articles, with the exception of coal, which is, of course, subject to regulation; the same is true of all principal foods.

The details of price movements in foreign countries are difficult to trace with precision, but taking the four important foods—bread, beef, butter and milk—and the most accurate prices which can be obtained, the following Table sets out the comparison between the United Kingdom and certain other countries, Allied, Neutral and Enemy.

—	July, 1914	July, 1917	Oct., 1917	July, 1918	Oct., 1918	Average Monthly increase between	
						July, 1914 and July, 1917	July, 1917 and Oct., 1918
United Kingdom	100	185	179	179	195	2·36	0·67
France ...	100	170	160	203	220	1·94	3·33
Italy ...	100	149	154	256	264	1·36	7·67
United States	100	140	148	153	161	1·11	1·40
Sweden ...	100	160	178	268	305	1·66	9·67
Switzerland ...	100	180	186	213	215	2·22	2·33
Germany ...	100	181	201	249	228	2·25	3·13
Austria ...	100	318	367	502	622	6·06	20·27

It will be seen that the monthly rate of increase which prior to July, 1917, was higher in this country than in any other with the exception of Austria, fell off to such an extent that the total rise since July, 1914, was less than in any other country except the United States of America, and the rate of increase during the past fifteen months to October was only one half of that in the latter country.

## CHAPTER XIV.

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**PENSIONS AND RESETTLEMENT.**

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**A. Ministry of Pensions.**

Experience of the working of the revised pension warrant of 1917 brought to light a few defects in its provisions which were remedied by a new pension warrant issued in April, 1918. At the same time, opportunity was taken to meet the increased cost of living by some adjustment of the rates of pension. Increased prices fall most heavily upon the man with a family, and to meet this the new Warrant raised the rate of allowance for children to a maximum of 6s. 8d. a week instead of 5s. for the first child; 5s. instead of 4s. 2d. for the second; 4s. 2d. instead of 3s. 4d. for the third; and 4s. 2d. instead of 2s. 6d. for any other child. Again, the position of the widow whose husband before enlistment earned a fair income was ameliorated by an increase in her "Alternative Pension." Under the new Warrant she can obtain two-thirds instead of one-half of what would have been her husband's maximum Alternative Pension.

Towards the close of 1918 the position with regard to the cost of living was again reviewed and a temporary war bonus of 20 per cent. was added generally to disablement pension.

The Alternative Pension system, introduced for the first time in 1917, has proved a substantial boon. Its advantage may be estimated from the fact that the additional pension being paid to pensioners in receipt of Alternative Pensions amounted at the end of 1918 to an annual value of £300,000 more than was represented by their ordinary pensions, including children's allowances.

The disparity between the disability pensions obtainable under the new Warrants by men disabled in the present war and those allowed under former Warrants by men disabled in earlier wars was recognised by the Government as a hardship which, in view more especially of the increased cost of living, could not be defended and the two classes of pension have by the issue of fresh Warrants been made, as far as practicable, to correspond.

Men of the Mercantile Marine serving afloat and in the pay and service of the Admiralty were previously compensated for death or disablement under the Injuries in War (Compensation) Acts on a scale of pension inferior to that provided for men in Naval Service. The two scales of pension have now been placed on a level and awards to the men and their families will be administered by the Ministry of Pensions.

The reconstructive side of the Ministry's work, embracing both the medical treatment of disabled men and their restoration to industrial life where their disablements preclude them from

returning to their old occupations, made substantial progress during the year. By special arrangements with public general hospitals in all parts of the country the Ministry of Pensions secured preferential terms of treatment for disabled men. Public hospitals have, however, of course, to serve the needs of the civilian population, and the accommodation they could spare for disabled men proved to be insufficient for their needs.\* The Ministry were therefore driven to provide special institutions. At the end of 1918 42,428 discharged men were receiving treatment at the expense of the Ministry, of whom 30,743 were inmates of, or out-patients at, public hospitals and other institutions. Although not primarily charged with the provision for treatment of discharged men suffering from tuberculosis, the Ministry have undertaken the responsibility of acquiring accommodation for cases of advanced tuberculosis and are providing for their treatment. Unfortunately, many tuberculous men refuse sanatorium treatment and during the last six months of the year upwards of 1,263 were reported to the Ministry. Aural Boards have been set up in London and the provinces to deal with the war-deaf, lip-reading classes have been provided in various centres, and every inducement is given to deaf men to learn lip-reading.

An important function of the Ministry is to provide disabled men with artificial limbs. To carry out this object, and to expedite and increase the very small supply of artificial limbs available, a British Limbmakers' Association was formed; standardisation is progressing and to assist in the process an experimental laboratory has been established where experiments are made and improvements and new inventions worked out. The waiting list is being steadily reduced. Experience having shown that many men find their artificial limb uncomfortable and rapidly discard its use, special instruction is being given so as to accustom men to the easy use of their new limb and to fit them for being trained in some suitable and profitable occupation.

Industrial rehabilitation of disabled men by vocational training has been hampered by the abnormal conditions of the labour market, which made it possible for any man not incapable of work to obtain employment without much difficulty. During 1918 fresh encouragement was given to men to apply for training by providing for their maintenance while waiting to take up their course of training and by arranging that their board and lodging whilst under training should not exceed 17s. 6d. a week. Married men living at home were also given special allowances in certain cases. Up to the end of the year 20,828 men had availed themselves of the training facilities afforded by the Ministry.

The re-employment of discharged men is carried out normally through the employment exchanges of the Ministry of Labour.

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\* The position was to some extent relieved by the signing of the armistice, which enabled the Military Authorities to re-admit discharged disabled men to Military and Auxiliary Hospitals.

During the year, owing to the exceptional demands of the labour market, re-employment was not a matter of difficulty except in a fraction of the cases where the disablement was so severe as to preclude the man from doing a normal day's work, but in anticipation of less favourable times when demobilisation has taken place, the Ministry have been endeavouring in various directions to secure stable employment for disabled men. Training for skilled occupations, where this is possible, offers for obvious reasons the best security against unemployment, but for the residue of cases employers of all classes are being asked to agree to special arrangements for the re-instatement of disabled men. Government Departments are doing much in this direction, and Local Authorities have, at the instance of the Ministry, agreed to give a preference to disabled men for all suitable openings in their service. Public Utility Corporations, such as the Omnibus and Tramway Companies, and Gas, Water, and Electric Light undertakings, have been invited to co-operate on the same lines and have in general readily agreed.

The work of dealing with disabled men is fundamentally a matter of local action, and the Ministry has relied mainly upon the Local War Pensions Committees, set up in several counties and towns of the Kingdom, who are given substantial powers for the assistance of discharged disabled men and other classes affected by the operation of the war. On the other hand many of these Committees need supervision and advice, some have shown a deficiency in activity, whilst there has been throughout a great diversity of methods. To secure uniformity and a higher level of efficiency, the Outdoor Staff has been reorganised and largely augmented, and already a higher standard has been reached.

The financial effect of the modifications introduced by the new Pensions Warrants of 1918, and of changes in the regulations, is represented by an increase of over £3,500,000 in the estimated expenditure upon disability pensions and the medical treatment and vocational training of disabled men, for the year ending 31st March, 1919, the total cost for the year now being placed at over £47,500,000.

Early in the present year the Minister of Pensions decided to make use of the powers given him by the Naval and Military War Pensions Act, 1917, to appeal to the public for funds to meet cases arising among officers and men invalided as disabled from the Services who required assistance to enable them to start again in life. The Fund thus initiated received important stimulus from the gracious gift of their Majesties, who contributed the whole of the gift from the City of London presented to them on the occasion of their silver wedding, together with a substantial donation of their own, amounting in all to £81,000, and the Fund, which has, in consequence, become the King's Fund for Disabled Sailors and Soldiers, received in donations up to 11th February about £800,000, of which nearly £300,000 has been expended. Over 7,000 men have been assisted from the Fund, and the applications for assistance are being received at the rate of 2,500 a week.



## B. Resettlement.

### I.—The Work of the Pre-Armistice Period.

Before the armistice, the term "Resettlement" was connected in the minds of most people with the period following the war when our victorious armies were to be disbanded, and the munition factories to return to peaceful production. It was too often forgotten that the process of resettlement had, in fact, already begun. Hundreds of thousands of men and thousands of officers, even before the armistice, had already been discharged from the Forces as unfit for further service, in the vast majority of cases on account of wounds, disease or other disability. The resettlement of these men, and of others still to follow them, is not the least part of the general problem, and there is no part of it which places a heavier responsibility on the Government, whose duty it is to do everything in its power to assist the disabled man to find a position in civil life commensurate with the service he has rendered to the country. It may, therefore, be of interest to explain what had already been done, and some of the difficulties which had been encountered, by the 11th of November, the date of the armistice. Much light may thus be thrown on the steps taken by the Government to cope with the full problems which presented themselves during the last months of 1918. The pre-armistice period was mainly concerned with the disabled soldier. The post-armistice period involved also the demobilised soldier and the civilian whose occupation ended with open hostilities.

#### THE DISABLED SOLDIER.

*Provision of Employment.*—The statutory duty of providing for the training and employment of disabled men rests with the Ministry of Pensions, but that Department called upon the Ministry of Labour to assist it in its task, and there is now a close working arrangement between the two Departments over the whole field. As far back as April, 1915, arrangements were made whereby the Employment Department of the Ministry of Labour (then part of the Board of Trade) was immediately notified of all discharges of men from the Colours by the Admiralty and the War Office, and a similar arrangement has been made with the Air Ministry. A large proportion of those who are now discharged pass through special discharge centres situated in each Command. At each of these centres there is practically a special employment exchange at which every man is interviewed by officers of the Department. They find out what kind of employment he wants, and where he wishes to look for it, and take full particulars of his qualifications, which they forward to the employment exchange in the area where he intends to live. When he gets back to his home district the manager of the employment exchange keeps in contact with him until he knows either that employment has been found or that the assistance of the exchange is not required in order to find it.

In order that this work might be done efficiently, it was found necessary to amplify the ordinary methods and machinery of the employment exchanges. Each exchange now has a special branch with special officers trained to the work for dealing with disabled men. An interviewing officer has to judge the extent of any disability from which an ex-soldier may be suffering and the kind of employment for which he is suited—whether, that is, he can do a full day's work, and whether he can still do the work to which he was accustomed before he joined the Forces, or whether some special light work will have to be found for him. The exact nature and degree of the disability is classified and every effort is made to find the man a job which it is within his powers to take up, though difficulty is already being experienced in finding sufficient light jobs in certain districts where the staple industries are of a character requiring full health and strength. There is also a special branch at the headquarters of the Employment Department in London, staffed largely by ex-service men, whose sole duty is to look after the interests of the discharged soldier. A special exchange for ex-service men has also been started in Catherine Street, Strand. In order that the disabled may not be put to undue fatigue or expense, the Department arranged for the payment of the travelling expenses of those who live more than five miles from the nearest exchange when they are asked to attend for interview, and this arrangement also applies to men who have a shorter distance to go, but whose disability prevents them from doing the journey on foot.

*Local Advisory Committees.*—In addition to the work of the ordinary exchange officials, it was felt that more might be done if the interest and sympathy of the people of the locality could be invoked on behalf of the disabled men. This was not in itself a difficult task, but it required to be done in such a way as to link it up closely with the machinery of the employment exchanges. During 1918 the Minister of Labour formed what are known as Local Advisory Committees in connexion with every exchange in the country. These committees consist of an equal number of representative employers and workpeople, presided over by a well-known resident in the district. In order to link their efforts with those of the Local War Pensions Committees, steps were taken to form joint sub-committees to deal with all questions affecting the employment of discharged men in their areas. The local influence and knowledge possessed by these sub-committees has proved invaluable in assisting the ex-service man. Many of them formed rotas for interviewing those whose disabilities made their return to civil life difficult. It has been found that practically every man who is fit enough to undertake work in ordinary industry can be placed without much delay, but the task of finding sufficient light jobs for men whose health has been seriously impaired has often proved formidable. It is in these cases that the assistance of the joint sub-committees has been of particular value. The employers sitting on them have often been able to find suitable openings either in their own works or in those of their neighbours, while in other cases the trade union members have known of some job in a particular shop exactly

suited to the man before them. The sub-committees have, moreover, taken up such general questions as the employment of discharged men by Municipal Corporations and the local offices of Government Departments. In order to make the system of enlisting local interest as complete as possible, the Department entered into negotiations with various voluntary associations and Regimental Aid Societies in order to obtain their assistance also.

From the 12th January to the 6th September, 1918, 172,644 discharged men were notified to the Department, of whom 80,822 registered at the employment exchanges for employment. Of those registered 38,692 were placed during that period. Of those who were not placed by the exchanges some were still unfit for work, while others found work for themselves. Of those who registered, the majority returned to their old employment or else took up one of the courses of industrial training referred to below. Of those placed by the employment exchanges, one-half were placed within a week of registration, and only 4·6 per cent. remained on the register as long as seven or more weeks before being placed.

All difficulties, however, are not always at an end when employment has been found for the ex-soldier. Complaints are not uncommonly made that he is receiving a lower wage than his fellow workmen for performing the same kind of work. In order to deal with such cases and to prevent the exploitation of discharged men by taking their pensions into account, Advisory Wages Boards were set up in 19 important industrial areas in 1917, consisting of representatives of local employers and workmen. These Boards were able to give authoritative advice as to the rate of wages which should be paid in any particular case, and to assist the War Pensions Committee in assessing the earning capacity of a man who had applied for an alternative pension under the Royal Warrant. When the Local Advisory Committees were formed, however, the functions which these Boards had discharged were transferred to them, and all complaints as to wages and conditions of employment are now dealt with by them, unless there is some other body already in existence for the particular industry competent to deal with them.

*Training.*—It was recognised, however, when the Pensions Act was passed, that in order to facilitate the task of finding employment for disabled men it would be necessary to train in new trades those men whose disability prevented them from following their old occupations. In order that this might be done, it was necessary to arrange schemes of industrial training founded on the custom and practice of the various trades, and to do this the Ministry of Labour, in conjunction with the Ministry of Pensions, set up joint committees of employers' and workpeople's representatives to work out such schemes. Twenty-three of these National Trade Advisory Committees have been formed covering the following industries:—Engineering and shipbuilding (including Sub-Committee for aircraft); building (including Sub-Committees for bricklaying, carpentry and joinery, masonry and stone carving, painting and decorating, plastering, plumbing and

heating engineering, slating and tiling); printing; furniture; leather goods trades; boot and shoe manufacture; handsewn boot and shoe making; boot and shoe repairing and clog making and repairing trades; tailoring; cinematograph industry; cane and willow industry (including basket-making and cane and wicker furniture); gold, silver and jewellery; brush making; dental mechanics; electricity (power and light); cotton industry; lace industry; distributive trades; pharmacists; hosiery latch needles manufacture; musical instrument making (including pianofortes and organs); vehicle building; glass industry and fine chemicals. The committees in every case are thoroughly representative of employers and trade unions in the industry, and they have taken an immense amount of trouble in determining the branches of work for which men with particular kinds of disability would be suitable, and in preparing schemes for their training. During training a disabled man is guaranteed a minimum weekly maintenance allowance of 27s. 6d. a week, with allowances for children and certain other allowances. These allowances are paid by the Ministry of Pensions in full when their training is in a technical school and when no wages are payable by an employer during training in a workshop. But the schemes of training are so arranged that during training in a workshop, as progress is made, wages are payable by the employer on a graduated scale, and the minimum maintenance allowance of 27s. 6d. payable by the Ministry of Pensions is reduced.

By October, 1918, some 10,000 men had been trained, or were in training, in technical institutes, factories, or workshops; while, in addition, some 3,000 were in training, or had been trained, in Lord Roberts' workshops, St. Dunstan's, and a further 4,800 in the schools established by the Ministry of Munitions. Various causes accounted for the relatively small number of men who elected to receive training in new occupations while open hostilities continued. Very high wages were obtainable for temporary war work, and the great demand for unskilled labour to fill the places of those absent on military service offered immediate possibilities of much higher remuneration than that which the man in training received until he was well advanced in his new trade. It has also to be remembered that a large number of discharged men were completely disabled, or were not fitted to benefit by training in work to which they are wholly unaccustomed. The number of men, however, rose steadily and grew before the armistice from 20 to 150, or even 200, a week.

In order to assist Local War Pensions Committees in arrangements for the training of disabled men the National Trade Advisory Committees arranged for the establishment of Local Technical Advisory Committees in the particular areas where their industry is carried on. These local committees interview applicants for training and advise the Local War Pensions Committees whether the men are suitable for the industry, whether the training proposed is suitable, and on other technical matters. These Local Technical Advisory Committees usually work closely with the Local Advisory Committees attached to the employment exchanges.

## INTERRUPTION OF APPRENTICESHIPS.

*State Assistance.*—There is one other important problem in connexion with the resettlement of ex-soldiers in industry with which the Ministry of Labour was already attempting to deal when the armistice was signed. A considerable number of apprentices, discharged from the Army, had missed a substantial part of their apprenticeship owing to their military service, and were at an age when they normally would have been earning the full wages of a man. If they wished to complete their interrupted apprenticeship, they could only do so by resuming it at the point where they left off and at a wage which, though commensurate with their degree of skill, would not be sufficient for a full-grown man, especially if, as often happened, he had married during his period of military service. In many cases, therefore, these men would have had to abandon their ambition to become skilled men and to content themselves with semi-skilled or unskilled work, which, though carrying a higher rate of pay than they would earn during the remainder of their apprenticeship, would never equal the earnings of the fully qualified journeyman. It was, therefore, felt necessary that the State should assist the apprentice whose period of training had been interrupted by war service, and the Minister of Labour introduced a Bill dealing with the matter which provided for State assistance to be given during the remainder of the period of apprenticeship in order to bring the rate of remuneration up to a man's earnings. As in the case of the training scheme for disabled men, the payments made by the State and the employer graduated downwards and upwards respectively, and it was made a condition of every scheme that the period of training should be reduced by at least one-third. Although the Bill died with the dissolution of Parliament, the Government's attitude towards the problem had been defined and a line of advance indicated.

## RESETTLEMENT OF OFFICERS.

*Appointments Department.*—The whole question of the resettlement of the officer was examined by a committee appointed by the Ministry of Reconstruction for the purpose. This committee recommended that a special Department of the Ministry of Labour should be established in order to deal with officers and men of like standing, and that, in order to assist it, two committees should be appointed, one to deal with training and the other with employment. As a consequence, the Appointments Department of the Ministry of Labour was formed in March, 1918, its staff consisting almost entirely of officers and ex-officers. During the period from its formation to the signing of the armistice, it was largely engaged in setting up and perfecting its organisation. District offices were set up at 11 large towns throughout the United Kingdom, while special sections were established to deal with the British Empire overseas and with foreign countries. Considerable progress was made in both the training and the re-education of officers, and in establishing relations with

Chambers of Commerce, employers and others with a view to finding employment.

A few figures will illustrate the work which the Department had done, and some of the difficulties with which it was (and still is) confronted. The need for its existence is shown by the fact that in a period of six months 13,000 inquiries were received from officers and men and over 8,000 were interviewed. The Department has endeavoured to obtain the most precise and up-to-date information available as to the prospects in every type of professional career, and distributes this information as widely and freely as possible. Many officers who have sought its help and advice have succeeded in obtaining employment for themselves on the strength of the information which they have received, but these do not, of course, go to swell the total number of men placed in employment to the credit of the Department. During six months from May, 1918, however, when the Department became sufficiently staffed and organised to deal with applications, 1,150 officers and men were placed in employment and 175 civilians. In addition, 1,000 officers and men were offered appointments and declined them, while 700 were refused by employers for lack of sufficient qualifications.

These last two figures indicate two great difficulties with which the Department has to contend. The first is that the average subaltern has been receiving a higher rate of pay in the Army than a man of his age would have commanded in civil life before the war. When he is discharged he is naturally unwilling to accept a salary smaller than his Army pay, and if he is married, as is very frequently the case, it may be practically impossible for him to do so. At the same time, in a vast number of cases he has gone into the Army straight from school, or his professional training has been interrupted at a comparatively early stage. This means that he is not really qualified for a professional or business post and that he does not command in civil life a salary such as he is seeking. It is mainly for these two reasons combined that the number of men placed in communication with employers without result has largely exceeded the number who have obtained employment. It should be remembered, however, that practically all the men with whom the Department dealt before November, 1918, had been discharged through disability. It was estimated, for this period, that 80 per cent. of the 3,000 discharged officers who were interviewed were suffering from neurasthenia to a greater or less degree.

*University and Technical Training.*—What has been said above both as regards lack of professional qualifications and as to disability, points to the main lesson impressed by experience on the Department, *viz.*, that in order to render a large proportion of discharged officers fit to take their place in civil life it is essential that they should undergo some form of training or re-education. It was the realisation of this that led to the institution by the Ministry of Labour of the Officers' University and Technical Training Classes. Before the Appointments Department was formed, the Ministry of Munitions had arranged that convalescent

officers should take technical classes in order to fit them for inspectorships and other technical posts under the Department. The experience of these classes soon showed that they were of immense benefit to the officers from a mental and physical, as well as from a purely intellectual, point of view. The mental stimulus given by regular instruction was found to assist wounded men, and particularly those suffering from shell-shock, to recover far more rapidly than was normally the case. It was, therefore, decided to combine this work with that of finding employment for officers, and the training organisation set up by the Ministry of Munitions formed the nucleus of the Appointments Department. The scheme was then extended in order to enable officers to obtain instruction at Universities in any subject, or training with individual firms during their period of convalescence. Arrangements were made with the War Office by which any officer who was passed unfit for General Service for six months might apply to the Department to undergo a course of training at a University or Technical Institution, while retaining the full pay and allowances of his rank. Later, this privilege was extended to those unfit for service for three months, and was applied also to N.C.O.'s and privates. By October, 1918, 500 officers had been trained and placed in employment, while 1,700 were undergoing training. The results abundantly proved the benefit of these courses, and the great service rendered to those who had taken them in assisting them to obtain employment in civil life.

In order that a scheme might be developed and extended on the best possible lines, a committee was set up jointly by the Presidents of the Boards of Education and Agriculture and the Ministers of Labour and Pensions, known as "The Officers' University and Technical Training Committee," of which Lieut.-General Sir Alfred Keogh, formerly in charge of the Army Medical Service, is Chairman. In addition to the official members, it includes representatives of the Universities, of organisations for professional training, and of the Associated Chambers of Commerce and the Federation of British Industries. A further committee, under the chairmanship of Lord Burnham, was appointed by the Minister of Labour to deal with the general question of the Resettlement of Officers. It is mainly composed of representatives of business and professional organisations, together with men qualified to speak for the ex-officer. These two committees work in close co-operation, and deal respectively with the training and employment aspects of the problem.

In order to bring about complete co-operation, the Minister of Pensions arranged to exercise his functions in regard to the training and employment of disabled officers through the Appointments Department and a special staff from the Ministry of Pensions arranged to exercise his functions in regard to the and experiment, and a careful study of each case, that the Department can ascertain what type of employment is likely to be suitable to a particular man, taking his physical condition into account. In order to put this work on a scientific basis, the

assistance of eminent surgeons and medical men is being obtained, and in time it is hoped to arrive at a scientific classification of employment in relation to disability.

#### GENERAL POST-WAR PROBLEMS.

*Preparation in advance.*—It has been seen how in certain directions the period before the armistice was occupied in actually dealing with certain problems of resettlement which had already arisen, but which would be renewed with far greater intensity when the end of the war came. There remained even wider problems which could be seen ahead, but for which preparation was all that was possible.

In order to assist the Ministry of Labour in framing its plans, a committee was appointed in March, 1918, known as the Labour Resettlement Committee. The committee consists of 55 members, representing all the principal industries of the country. Of these members, 39 were nominated by associations of employers or workpeople, or by such bodies as the Parliamentary Committee of the Trades Union Congress, the Federation of British Industries and Associated Chambers of Commerce. Four are women, and the remaining 12 representatives of the various Government Departments concerned. The Minister of Labour is Chairman, and Lord Burnham Vice-Chairman of the committee, which has divided itself into three sub-committees to consider the various problems connected with resettlement. Such problems were the functions of Labour Advisory Committees in connection with demobilisation, apprenticeships interrupted by War Service, unemployment insurance, and the employment of disabled men. The committee continues to sit during the period of demobilisation in order to advise the Department on the various questions which arise in connexion with the demobilisation of the Forces and the resettlement of civil war workers. The same principle of associating representatives of employers and workpeople with the Government in the work of resettlement was applied locally as well as centrally. As has been mentioned above, Labour Advisory Committees were appointed in every district to assist the employment exchanges with their work. This was done in the hope (since justified) that when demobilisation began these committees would play a prominent part in resettling the sailors, soldiers and munition workers of their own localities. They were given the widest possible functions of advice and guidance in connexion with the work of the exchanges, and performed before the armistice a great deal of valuable work, particularly in connexion with the resettlement of disabled soldiers, to which reference has already been made. Before hostilities had ceased the Labour Advisory Committees had received a memorandum drawn up by the Labour Resettlement Committee, containing detailed suggestions as to how they should proceed in connexion with demobilisation, and they were occupied with the preparatory work necessary in order to provide employment for the returning soldiers and the workers displaced by the cessation of war contracts.



In addition to the activities shown by these bodies, the Admiralty, War Office, Ministry of Labour and other Departments concerned were engaged in working out the machinery necessary for demobilisation and resettlement. A committee known as the Demobilisation of the Forces Co-ordination Committee, which consists of representatives of all these Departments, had been at work since August, 1917, with a view to ensuring co-ordination in every detail between the plans of the fighting Departments and those of the Ministry of Labour for bringing the men from the Forces back to civil life as speedily and smoothly as possible.

It has to be remembered, however, that all the work that was done during the war in connexion with resettlement was necessarily based on assumptions which were largely guess-work, since the conditions which would actually prevail when the war came to an end could not possibly be foreseen. The season of the year, the state of credit, the extent of shipping losses, the supplies of raw material, and other similar questions all enter into the problem of employment, and until the actual conditions were known it was impossible to forecast the actual extent and difficulty of the problem which would have to be solved. The plans which were laid were, therefore, bound to require considerable modifications and adjustments when the time came for putting them into practice. It was impossible to tell beforehand how far they would be adequate to the situation, but everything practicable was done in the way of thinking out the problem in advance so far as it could be visualised. The preparations for resettlement when peace should come were as complete as it was possible to make them without knowledge of the precise conditions which would prevail when hostilities ended.

## II. — After the Armistice.

(November—December, 1918.)

### *Department of Civil Demobilisation and Resettlement.*

On the signing of the armistice the question of demobilisation and the various problems which cluster around it immediately assumed prime urgency. The issues group themselves in three main branches :—

- (1) The release of men from duty with the combatant forces;
- (2) The passage of these men back into civil life; and
- (3) The release from the factories of munition workers engaged on tasks which had become superfluous, and the restoration of the workers to their normal occupation before the war.

The first of the three main undertakings rests with the War Office. In the case of (2) and (3), the administration is concerned with those who, having been in the fighting Forces, have now become civilians, or with workers who have never been

in the fighting Forces at all. In order, therefore, to deal with the demobilisation of civilian workmen and the resettlement in civil life of all demobilised persons, whether coming from the Army or from the factories, it became necessary to establish a new administrative department which was called the Department of Civil Demobilisation and Resettlement. This Department was attached to the Ministry of Labour under the direction of a Controller-General. Sir Stephenson Kent, K.C.B., previously Director of Labour Supply in the Ministry of Munitions, was invited by the War Cabinet to assume this important post. The work begun under the new Department had not assumed its full proportions by the end of 1918, and the problems with which it had to deal were not fully developed.

The functions of the Controller-General's Department covered all questions affecting the re-employment and resettlement of the Army, Navy and Air Forces, and of civil war workers. At his disposal were placed, in addition to the Appointments Department, the staff and machinery of the Employment Department of the Ministry of Labour, including the organisation concerned with administration of the employment exchanges and of unemployment insurance. Further, it was arranged that the functions of the Labour Departments of the Admiralty and the Ministry of Munitions were to be transferred to the Ministry of Labour as soon as practicable, and that the necessary staff would be attached to the new Department under the Controller-General.

The work of the Demobilisation Department was subdivided among various branches. The principal branches and their functions were as follows :—

- (1) The Negotiations Branch, concerned with the hearing of complaints, the receiving of deputations and the advising of the Department generally on labour matters ;
- (2) The Employment Department, subdivided into three branches dealing respectively with :—
  - (a) Employment exchange machinery and the general supervision of employment exchange activities throughout the country ;
  - (b) Employment exchange policy and the administration of the Labour Exchange Acts, together with such questions as the employment of disabled men, the repatriation and employment of colonials, aliens and prisoners of war ;
  - (c) Unemployment insurance and the emigration and employment of juveniles.
- (3) The Appointments Department. The organisation and general functions of this Department in the pre-armistice period are described above.\* With the armistice the scope of this work was greatly extended, and some indication of this fuller work is given on page 283 ;

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\* See p. 273 *supra*.

- (4) The Demobilisation of the Forces Branch, dealing with the release of pivotal men, and questions of industrial priority of demobilization ;
- (5) The Civil Demobilisation Branch, concerned with the demobilisation of civil workers and the provision of employment.

Associated with this central organisation is the Labour Resettlement Committee and its sub-committees.\*

Other Government Departments, such as the Ministry of Munitions, War Office and Admiralty, have their own peculiar problems in connexion with demobilisation, and have appropriate organisations for dealing with them. With the view of co-ordinating the activities of all the Government Departments engaged in the work of demobilisation, the War Cabinet set up a Co-ordination of Demobilisation Section, presided over by Sir Eric Geddes (formerly First Lord of the Admiralty), who was invested with the full authority of the War Cabinet in dealing with the matter.

The local bodies upon which the Department depends for advice as to every aspect of demobilisation and resettlement are the Local Advisory Committees, the pre-armistice functions of which have already been described, but which, with the cessation of hostilities, were called upon, as will be seen later, to perform much wider duties.

The increase, however, both in the quantity and importance of the work of the Local Advisory Committees, made it necessary to decentralise the work of co-ordinating their activities which, before the armistice, had been performed at the headquarters of the Ministry of Labour. With this end in view it was decided to establish a Divisional Council for each of the nine administrative divisions into which the country is divided for employment exchange purposes. The Councils consist of representatives nominated from among their several members by the Local Advisory Committees in the division, with an independent Chairman for each Council appointed by the Minister of Labour. Their functions will be for their wider areas similar to those performed by each committee in its smaller area, but they will not in any way supersede the Local Advisory Committees or deprive them of the responsibilities undertaken before the creation of the Councils.

#### GENERAL LINES OF RESETTLEMENT.

The main lines of the Department's work during the closing months of 1918 may be dealt with under three headings :—

- (a) Employment exchanges, Local Advisory Committees ;
- (b) Unemployment donation ;
- (c) Reabsorption of Women Workers ;
- (d) Demobilisation of the Forces.

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\* See p. 276 *supra*.

Developments of detail in the operations of the Government's scheme occurred almost daily during these months, but the general pre-arranged policy for dealing with the problems which followed on the cessation of hostilities remained unchanged in any essential feature.

(a) *Employment Exchanges and Local Advisory Committees.*

—The cessation of hostilities brought with it the risk of widespread unemployment before industry could be established on a peace footing. To meet this risk, and to deal also with the partial demobilisation which now became possible, steps were taken to strengthen the local machinery for bringing together employers with work to offer and workers (whether in the Army or in civil life) who were in need of employment. The employment exchange staffs were strengthened and premises were enlarged freely. The Local Advisory Committees who, during the continuance of hostilities, had centred their attention mainly on securing workpeople for various forms of war employment and providing suitable employment for men discharged from the Forces, were now called upon to fulfil much broader functions in the field of resettlement. They became the source of advice for the Department on every aspect of demobilisation and resettlement, and became recognised as bodies responsible in their respective areas for the work of resettling men and women in industry and for co-ordinating the activities of all local agencies dealing with various aspects of this problem. They are carrying out on behalf of the Government important inquiries as to the demand for, and the supply of, labour throughout the country, in order to present for the several local areas a picture of the situation as regards unemployment and an approximate estimate of the extent to which absorption of the unemployed may be possible within the next few months. As will be seen later, they have also been called upon to play an important part in the Government's schemes for the demobilisation of the Forces. The Divisional Councils' work in co-ordinating their activities will complete the local machinery upon which the Government depends.

(b) *Unemployment Donation.*—This strengthening of the local machinery was not, however, the only step taken to cope with the period of abnormal unemployment which was anticipated. As a temporary measure the Government adopted a scheme of non-contributory unemployment donation. The broad conditions of this scheme as it affects civilian workers were that the benefit remained in force for a period of six months, and might be drawn for a maximum of 13 weeks during that period in cases where unemployment could not be avoided. Under this temporary scheme the benefits received were on the following scale, as revised shortly after the institution of the donation :—

- (a) To unemployed men from 18 years of age, a donation of 29s. a week; and to unemployed women over 18, a donation of 25s. a week;

- (b) An additional allowance in respect of dependent children under 15 years of age, fixed at 6s. a week for the first child and 3s. for each additional child;
- (c) A further provision for unemployed juveniles between the ages of 15 and 18 of 14s. 6d. per week for boys and 12s. 6d. per week for girls, conditional on their attending, if required, a course of instruction approved by the Board of Education or of the Department concerned.

These proposals were intended to bridge over the inevitable period of dislocation resulting from the transference of industry from war conditions to those of peace. While they are in force the existing compulsory unemployment insurance scheme remains in suspense so far as benefits are concerned. A similar grant was made to members of His Majesty's Forces below commissioned rank who have served during the present war. The period during which the grant is payable to such men is in general 12 months following the date of demobilisation of the individual concerned and the maximum period during which it is payable is 26 weeks.

(c) *Reabsorption of Women.*—The demobilisation of women war workers presented special problems. About 1½ million women had entered war industries, directly displacing men. The extent to which these women could be continued on men's work depended largely on the attitude of the trade unions and on the extent to which the men in the Army desired or were able to resume their former occupations. In addition, it was calculated that large numbers of women employed on women's work would be thrown out of employment during the transition period.

After consultation with the Advisory Committees of the chief trade unions employing women, the following lines of policy were put forward. It was suggested that women workers who intended to marry soldiers and sailors when the troops returned, and war brides who intended to settle down with their husbands, should withdraw from industry. It was proposed to establish training courses for these women in housewifery, infant welfare and similar subjects. For such of the more skilled women's trades as offered definite prospects of employment training courses—industrial, commercial and professional,—were suggested.

In order to carry out these proposals, the work in the Demobilisation and Resettlement Department was organized in two main divisions, the first dealing with the placing of women in employment and the second with the initiation and development of schemes for the employment and training of women and with provision for women's welfare. The welfare work included such questions as the housing and transport of workers, hostels, recreation and the supervision of discharges of women from munition factories.

(d) *Demobilisation: (i) Men and Non-Commissioned Officers.*—During November and December of 1918 general demobilisation

had not begun. The task of the Department was to direct the work of partial demobilisation which preceded it in such a way as to make as smooth as possible the resumption of civil duties by the millions of men eventually to be released.

The Department, therefore, was called on, in the first place, in accordance with the demobilisation scheme approved by the War Cabinet shortly before the armistice, to arrange for the release of a strictly limited number of men in advance of general demobilisation. The underlying principle by which their selection was guided was that industrial considerations must be kept in the foreground, while due allowance was made for individual claims, whether based on length of service or on purely personal considerations. Release must be by individuals in the first place and not by classes. The men primarily selected by the Department fell under two categories: (1) "Demobilisers"—officers and men required by Government Departments, railways, urban and borough councils and other authorities who share in the actual work of demobilisation; and (2) "pivotal men"—that is, men whose early release was considered to be of immediate national value for purposes of reconstruction or to facilitate the absorption in industry of unemployed workmen and soldiers returning to civil life. Even with men who could rightly be claimed as falling under one or other of these categories selection was necessary, as the number available for release was limited by military considerations. In this work of selection from lists provided by employers, the Department was assisted by trade organisations already in existence or specially constituted.

In certain directions, however, it was possible to arrange for the release of men by classes concurrently with the return of demobilisers and pivotal men. Classes thus open for release varied from time to time with the condition of the labour market and military conditions abroad, but the following list may be taken as typical of the situation during the later months of 1918:—

- (1) Coalminers;
- (2) Officers and men in hospital (after 28 days' stay in hospital), with Command Depôts, and in Overseas Convalescent Camps;
- (3) Men who had attained the age of 41 years when posted under the Military Service (No. 2) Act, 1918;
- (4) Men who, having completed their engagement, were retained under the Military Service (No. 2) Act, and who were over 41 years of age;
- (5) Men who volunteered for the duration of the war and who attained the age of 41 years on or before April 18th, 1918;
- (6) Men who were serving on a normal engagement and who agreed to continue to serve for the duration of the war, and who attained the age of 41 years on or before April 18th, 1918.

Side by side with these arrangements for partial demobilisation, the Department was called on to carry out the pre-arranged scheme for determining priority of release, as soon as further demobilisation was possible, in the case of officers and men with definite employment awaiting them. All men in the Forces were called upon to fill up forms giving the necessary details for placing them in civil employment, while at the same time employers were called upon to guarantee offers of employment for men whom they wished to take into their service on demobilisation. Under the original arrangements, the employment exchange machinery was used in order to establish the necessary junction of requests for employment on the part of the men and offers of work from the employers, and when such a junction was effected the man was registered as a "slip" man with priority of release. In order, however, to "speed up" this work, a revised procedure was adopted on the 13th December which permitted more direct communication between the man and his prospective employer in cases where the employment offered was that held by the man before the war. The offer of employment in such cases, made in official form, had to be submitted to the Local Advisory Committee for endorsement, in order to avoid, so far as possible, bogus or collusive guarantees of work. The endorsed offer was then forwarded direct to the individual man, who, if he wished to accept it, passed it on to his Commanding Officer, and so established a right to priority of release akin to that enjoyed by the "slip" man. Men so marked for priority of release were known commonly as "contract" men, and ranked for priority of release below the "pivotal" man but before the ordinary "slip" man.

On the basis of priority thus established by the Ministry of Labour, the Military Authorities arranged for the composition of dispersal drafts from the Army, including in each draft a certain percentage of men chosen for length of service, a certain number of "pivotal" men, "contract" men and "slip" men, and a certain number from the industrial groups open at the time for release. The arrangements made for the demobilisation of men in the Navy and Air Force followed closely the lines sketched above in the case of Army demobilisation.

(ii) *Officers.*—The determination of priority of release in the case of officers followed the lines laid down for non-commissioned officers and men. In the case of officers, however, the part taken in the work for other classes by the labour exchanges was entrusted to the appointments Department and its local directorates.

The facilities thus established in the case of officers were also extended to men or non-commissioned officers who could claim to be of equal educational standing.

It will thus be seen that the duties of the Appointments Department became greatly extended by the armistice. It was now called upon not to deal with disabled officers no longer

capable of military service, but to make arrangements for the ultimate resettlement in civil life of all officers who did not remain in the post-war Army. The training of men whose careers had been interrupted by the war was placed in its hands, and the Officers' University and Technical Classes thus assumed a new prominence. Through the activities of this Department, whose local organisations covered the whole of the United Kingdom and made provision for those who wished also to proceed to the Empire overseas, it was hoped to repair, so far as possible, the wastage of educated man power which the war had caused, and to see to it that no officer who had shown his ability during the war should find himself without opportunities for the full exercise of his powers in the days of peace.



## CHAPTER XV.

**SOCIAL WELFARE.****A. Health and Welfare.**

The increasing sense of the importance of the health of the nation, emphasised by each year of the war, culminated in November, 1918, in the introduction of the Ministry of Health Bill by Dr. Addison in the House of Commons. Meanwhile, throughout the year, each Department concerned with matters of health and welfare pursued a vigorous policy in its own field of work.

*Medical Service.*—The continuance of the war resulted in a still greater withdrawal for military service of doctors, nurses and sanitary officers who were previously engaged in attending to the health of the civil population. The drain on the medical profession throughout 1918 was particularly severe, and great vigilance was exercised by the Central Authorities concerned to prevent the reduction, below the limit consistent with safety, of the medical services available for particular districts. That this has been accomplished is shown by the absence of any serious outbreak of preventable infectious disease during the greater part of the year, but the widespread epidemic of influenza which occurred during the summer and the late autumn taxed the resources of the depleted medical service to the utmost.

By the regulations made under the Military Service Act, 1918, the Central Medical War Committee and the Scottish Medical Services War Emergency Committee were continued as the bodies entrusted with the selection of doctors for military service, in consultation with the reconstituted Ministry of National Service. The arrangement under which the Government Departments having responsibilities to Parliament in respect of particular medical services were consulted before a doctor was withdrawn for military employment was adhered to, and enabled a sufficient civil medical staff to be retained to deal with the demands of the various public health services of the country. Similar arrangements were made in respect of the necessary civil requirements as to dispensing chemists.

*Maternity and Child Welfare Work.*—Maternity and Child Welfare work received a distinct impetus in 1918 owing to the passing of the Maternity and Child Welfare Act and the extension of the grant administered by the Local Government Board to new services for promoting the health and physical welfare of expectant and nursing mothers and young children. Comprehensive schemes have now been adopted by local authorities throughout a large part of England and Wales, Scotland and Ireland, which include in varying degrees the appointment of health visitors, the provision of maternity and child welfare centres, the setting up of a more complete midwifery service, and

the establishment of maternity homes, hospitals and convalescent homes for nursing mothers and babies. There was also a great increase in the number of crèches, day nurseries and homes for children of women who go out to work, and of homes for orphaned or illegitimate children. By Order made under the Defence of the Realm Act local authorities were authorised early in the year to supply milk and food to expectant and nursing mothers, and milk for infants and young children, at cost price or below cost price where payment could not be made, and much advantage was taken of these powers. The amount of the grant distributed by the Local Government Board for these services was again practically doubled.

*Venereal Disease.*—Further progress was made with schemes for the gratuitous treatment of venereal disease. By the 31st December, 1918, 138 schemes had been submitted to the Local Government Board, of which 132, serving a population of over 33,500,000, had been approved, and work had already started at 134 Treatment Centres serving 86 per cent. of the total population. In the course of the passage through Parliament in 1918 of the National Health Insurance Bill an amendment was inserted providing Approved Societies with special facilities for amending their rules in such a way as to secure that persons suffering from venereal disease should not be suspended from sickness or disablement benefit. By this means it was hoped that they would receive the necessary medical treatment, with resulting advantage to the health of the community.

*Tuberculosis.*—The arrangements for the preferential treatment given to discharged sailors and soldiers suffering from tuberculosis were continued and extended during the year. The regular admission to residential treatment of from 150 to 200 cases a week imposed a severe strain on the sanatorium and hospital accommodation of the country, to which Insurance Committees and Local Authorities responded by sparing no efforts to place every bed as it became vacant at the disposal of these discharged men. The Insurance Commissions, working through the Insurance Committees, in conjunction with the Local Government Board, relieved the Pensions Ministry of the responsibility for the treatment of such patients; and they were enabled to give residential treatment promptly (in institutions approved by the Local Government Board) in all cases where competent medical opinion certified it to be necessary. In view of this growing demand for sanatorium accommodation, the Local Government Board have been authorised by the Treasury to resume the making of capital grants, which had been suspended since 1915, towards the cost of erecting additional institutions for this purpose. These will be provided in connection with the schemes of County and County Borough Councils for the treatment of this disease.

*Infectious and Epidemic Diseases.*—The problems of epidemic diseases and the administrative action needed to control them have been greatly affected and intensified by war conditions. These problems have received the close attention of the Local Government Board. In the case of diseases such as smallpox, plague, typhus and dysentery, which are likely to be brought in from the many parts of the world where just now they are seriously epidemic, the preventive measures taken at our ports and elsewhere were actively directed and organised by the Board's expert officers. Largely on account of these efforts and those of the local public health service, cases of these diseases were kept down to almost negligible numbers and they have not become epidemic. Other acute infectious diseases, like the great group of catarrhal infections (which includes influenza, and conditions like septic pneumonia, cerebro-spinal fever and poliomyelitis which often prevail excessively at the same time as epidemic influenza), were made the subject of continued investigation with a view to practicable preventive measures, the advice given being embodied in reports and memoranda issued by the Local Government Board. Special attention was given to the nature of so-called "botulism" or epidemic encephalitis, which appeared as a new, or at least as an unfamiliar, disease in this country during the year. The return to England of large numbers of men who had contracted malaria in Eastern war areas created a new danger in parts of England where mosquitoes capable of acting as the hosts of the malaria parasite abound. The discovery that in parts of Kent persons in civil life who had never been out of England had recently become infected by malaria led to an elaborate inquiry by the Local Government Board, in conjunction with the Army Medical Department and the British Museum (Natural History), into the distribution of the dangerous mosquitoes, and to an administrative scheme for meeting the new risk which has so far been attended with very satisfactory results.

*Welfare of the Blind.*—A new Department was established in 1918 in the Local Government Board to deal with this subject, in pursuance of recommendations contained in the report of the Departmental Committee on the Welfare of the Blind, and Advisory Committees were appointed in England and Wales and in Scotland to advise the Board on all matters relating to the care and supervision of the blind.

A register is being compiled with a view to obtaining adequate statistical information as to the number and classes of the blind population to be dealt with, and the Local Government Board have now under consideration a comprehensive scheme suggested by the Advisory Committees for dealing with education, employment and maintenance. A register of all approved societies and agencies for the blind is also in course of preparation, and the question of the prevention of blindness and the impairment of vision through disease and industrial accidents is being examined by a committee of experts.

*Research.*—Active investigation at all the chief centres in the country into medical problems of all kinds has been maintained by the Medical Research Committee. As in former years during the war, the Committee directed a large part of their work to the diminution of suffering and disease occasioned by war, and gave assistance at many points to the scientific work done for the Navy, Army, Ministry of Munitions and other Departments.

The work of the Committee to advance medical and surgical knowledge needed in warfare was again concerned with the methods of wound treatment, the scientific study of wound shock and the best methods of wound surgery, together with the production of an efficient serum protective against wound gangrene. Studies of infections such as those of typhoid, paratyphoid and dysentery were continued, while in cerebro-spinal fever the work done in co-operation with the Army Medical Service resulted in the production of an improved curative serum which notably reduced the mortality of cases under treatment. The results of these studies and of work done upon trench nephritis and other subjects are being brought into relation with the work of the Pensions Ministry, and more generally with that of the civilian medical profession.

In other matters the Medical Research Committee have given unremitting labour. Their collection and analysis of the Army Medical and Surgical Records and their index of all sickness and casualties in the Army are being closely linked with the records of the Pensions Ministry which provide their natural complement, and with those of the National Service Ministry, which are yielding valuable new information upon the physical condition of the population at the effective adult ages. The Committee distributed many thousands of reports upon special subjects to workers at home and with our own and the Allied Forces overseas, and compiled and distributed a monthly Medical Supplement to the Review of the Foreign Press issued by the General Staff, War Office, giving abstracts of the latest and best foreign investigations in medical subjects. They had during the year the active co-operation of the corresponding American organisations for medical research, and this liaison has been fruitful in many directions.

In addition to these special applications of medical research to war problems, the Committee used the resources of their Fund in assisting the general progress of medical investigation, the improvement of pathological methods and the linking of work in the primary sciences with applied studies in medicine. So far as war conditions have allowed, inquiries into tuberculosis, influenza, pneumonia, rickets and other diseases were maintained, and studies of a more general kind upon the relations of soil, climate and social conditions to health, upon diet and growth, and upon the science of ventilation, were actively

forwarded. In some of these subjects, even during the difficulties of the past year, valuable advances were made by the scientific workers to whom the Committee have been able to bring assistance.

The Fourth Annual Report of the Committee, giving an account of their work up to 1st October, 1918, was laid before Parliament and published (Cd. 8981).

*Welfare Movement in Factories and Workshops.*—The combined forward movement of the Ministry of Munitions and the Home Office towards better conditions in factory and workshop, which was described in last year's Report and which had already been productive of so many improvements, progressed steadily throughout 1918. Several Welfare Orders were made during the year under the compulsory powers conferred on the Home Office by Section 7 of the Police, Factories, &c. (Miscellaneous Provisions) Act, 1916, one of the most noteworthy being the Order requiring the provision in shell factories of sitting facilities for the use of all women and girls employed in the processes of turning and machining.

Welfare work, as now understood, was little known in British industry before the war, although few employers had made successful attempts to introduce it. Developments, however, which will leave a permanent impress upon workshop life have resulted from the creation of such conditions in many munitions workshops as induce the workers to put forth their best efforts. Except in the case of those unhealthy industries which were brought under special regulations, the Factory Acts did not do more than enforce a minimum standard of healthful workshop conditions; the aim of the welfare movement has been to realise a maximum. The Health of Munition Workers' Committee, in presenting their final Report in April, 1918, wrote: "There can be no doubt that the position is now substantially different from what it was when the Committee were first appointed in September, 1915. There is apparently an increased appreciation of the importance of the whole question of industrial hygiene, and there can be no doubt that the environment and conditions of employment of munition workers throughout the country are now vastly better than they were two and a half years ago, though there is still much room and much need for improvement."

Since the Welfare Department of the Ministry of Munitions was instituted the number of Welfare Supervisors appointed in factories, up to the end of 1918, was 550 for women and girls and 235 for boys from the Ministry panel, and almost as many again from other sources. Training centres were established where candidates for these posts learnt their craft so far as it could

be taught, and, in addition, travelling officers visited the factories to initiate and to inspect the work.

The most recent development of welfare work has been its extension beyond the walls of the factory. Efforts were made to meet the needs of munition workers, who are handicapped by the conditions under which they are sometimes compelled to live. The main problems were those arising from the migration of large numbers of workers, particularly young women, for whom there was no adequate housing accommodation, and from the overcrowding of existing accommodation, which gave men and women little possibility of enjoying the ordinary comforts of home life after the day's work was done. Good service in this connection was rendered to the Ministry of Labour by the Health and Welfare Department and by the Advisory Committee on Women's War Employment (Industrial). Organisations were set up to deal with (1) hostels and lodging accommodation, ensuring suitable provision for temporary workers in any district; (2) transit problems, and where necessary the provision of adequate bus or tram shelter; (3) crèches and play centres, where the children of munition workers could be cared for while their mothers were at work; (4) maternity questions, the aim being the provision of healthy conditions for industrial mothers before, during and after confinement; (5) recreation schemes, providing wholesome enjoyment during the worker's free time. From the last of these has sprung a new development. The Ministry has co-operated with the Home Office in promoting civic recreation schemes. These schemes have been launched in some of the largest towns of the country, and are supported by representatives of employers and trade unionists acting in conjunction with the heads of municipalities and other public bodies.

*Hours of Work.*—Intimately bound up with the question of securing good welfare conditions for the worker is the question of the number of hours which may be worked with a due regard to efficiency. Long hours were inevitable in the first period of the war when the demand for output was urgent. But, as soon as practicable, efforts were made to reduce overtime, Sunday labour and night work, and to adjust shift systems to meet the desires of the workers. Between December, 1916, and June, 1918, the number of men engaged on Sunday labour on non-continuous processes was reduced by 72 per cent., and that of women by 55 per cent. Night work for girls was abolished and the night employment of women over that age was carefully safeguarded.

The scientific investigations into the effect of hours of labour on industrial fatigue and efficiency will in future be co-ordinated and extended by the Industrial Fatigue Research Board which has recently been appointed, at the instance of the Home Office, by the Department of Scientific and Industrial Research and the

Medical Research Committee. The Board is directed to investigate "the relation of hours of labour and other conditions of employment (including methods of work) to the production of fatigue, having regard both to industrial efficiency and to the preservation of health among the workers." Its work should have a direct and important bearing on the future conditions of employment in industry.

*Canteens.*—The canteen system was widely extended during 1918, and at the end of the year the number of canteens established in munition works was 900, serving an industrial population of close upon a million. When the canteen principle was first inaugurated power to grant financial aid to employers willing to provide canteens for the workers was vested in the Central Control Board. They continued to exercise these powers until early in 1918, when the Minister of Munitions, having regard to his responsibility for securing that the efficiency of the munition workers should not be imperilled by food difficulties, came to the conclusion that the control of canteens at munition works should be undertaken by a new department organised as part of the Ministry itself. It was understood, however, that this was only a temporary measure and that, as soon as the food emergency had passed, the work should revert to the Board, so that it might be resumed and developed on the lines they had already laid down.

The Food Section of the Ministry performed important service by acting as intermediary between the great body of munition workers and the Ministry of Food, in smoothing away the difficulties of obtaining supplies and in advising upon the efficient and economical management of canteens.

### **B. Liquor Control.**

The Central Control Board (Liquor Traffic), which was established as the "prescribed Government authority" by the Defence of the Realm (Liquor Control) Regulations, 1915, issued in pursuance of the Defence of the Realm (Amendment) (No. 3) Act, 1915, was one of the first of the specially constituted new Departments the creation of which was necessitated by the influence exerted by war conditions upon the life and habits of the nation. By the beginning of 1918 the Board had already been in existence for more than two and a half years, and not only were the main lines of its policy well settled, but also the areas to which the Liquor Control Regulations had been applied, and in which the ordinary regulations of the Board were operative, had for a considerable period covered by far the greater part of Great Britain, with an aggregate population amounting to some nineteen-twentieths of the whole. The only additions to these areas which it was necessary to make during 1918 consisted of the greater part of the County of Lincoln and as much of the County of Norfolk as was not already scheduled. A part of these districts was scheduled in April and the remainder in June.

The Board's standard form of Order restricting the hours of sale for on-consumption and the hours for off-sales, prohibiting treating and credit (with exceptions in the case of drink served with a meal), and making the regulations applicable to clubs as well as to licensed premises, was widely operative during 1918, and contributed largely to the decrease in intemperance. Within these general restrictions, variations were introduced to meet local conditions, and in certain areas supplementary forms of control were established. Thus, in the neighbourhood of certain large camps, the on-sale of spirits was confined to the mid-day opening hours, and in large districts in the North and North-West of Scotland the sale of spirits for on-consumption in licensed premises and clubs was altogether prohibited. The system of supervision of licensed premises, which was applied to the Glasgow Dock area and to the shores of the Firth of Forth, as described in detail in the War Cabinet Report for 1917, proved most successful in securing and maintaining a marked improvement in the conduct of the licensed premises in these important localities. A considerable extension of the supervised area at Glasgow was effected in 1918.

In consequence of the continued shortage of foodstuffs, the restrictions on the output of beer imposed by the Order of the Food Controller on the 29th March, 1917, were maintained with slight variations during the year under review. The annual output of beer therefore remained at about 50 per cent. of the standard barrelage previously authorised by the Output of Beer (Restriction) Act, 1916, or about 38 per cent. of the pre-war output. The amount of spirits available for consumption also remained restricted to 50 per cent. of the clearances from bond for 1916. Owing, however, to the progressive dilution of spirits and the decline in beer gravities, the bulk supply did not decrease proportionately, the bulk barrelage reduction in the case of beer being rather less than 30 per cent. The removal also of the restrictions on the clearances of wine from bond, which had been allowed in the autumn of 1917, held good throughout 1918.

Shortage of supplies, however, continued to be felt owing to the abnormal conditions abroad and to lack of transport, and this, together with the absence of any equitable method of retail distribution, was tending in 1917 to produce some confusion and discontent. Accordingly, early in 1918, the Board consulted the leading Licensed Trade Associations in England and Wales, and it was agreed that methods should be voluntarily adopted by the trade whereby the limited supplies of beer and spirits available might be as fairly distributed as possible among their customers.

The remarkable fall in the convictions for drunkenness recorded since the establishment of the Board progressed still further during the year under review, and the progress is the more remarkable if due consideration is taken of the low figure arrived at during 1917.



*Weekly Average of Convictions for Drunkenness in 1918.*

(Scheduled Areas in England and Wales.)

For 4 weeks ending	Jan. 27, 1918	...	...	710
" " "	Feb. 24, "	...	...	790
" " "	Mar. 24, "	...	...	736
" " "	Apl. 21, "	...	...	614
" " "	May 19, "	...	...	455
" " "	June 16, "	...	...	469
" " "	July 14, "	...	...	456
" " "	Aug. 11, "	...	...	463
" " "	Sep. 8, "	...	...	425
" " "	Oct. 6, "	...	...	478
" " "	Nov. 3, "	...	...	445
" " "	Dec. 1, "	...	...	473
" " "	Dec. 29, "	...	...	449

*Convictions in Previous Years.*

1914	...	...	...	...	3,388
1915	...	...	...	...	2,517
1916	...	...	...	...	1,544
1917	...	...	...	...	851

Equally satisfactory results were achieved in Scotland, where the weekly average of convictions immediately before the issue of the Board's main Order in 1915 was 1,485; the weekly average for 1917 was 603; and this fell again during 1918 to 355. The improvement has been progressive in character, and the weekly average for the last 4 weeks of the year reached the low figure of 259. The decline also in the convictions of women is as remarkable as it is destructive of the criticism that the absence of the army abroad invalidates all conclusions drawn from these statistics. In the scheduled areas in England and Wales, the weekly average of convictions of women for drunkenness, which was 672 in 1913, has fallen during 1918 to 137. It is held by some that it is easy to attach undue importance to the above figures, but further analysis of the figures and such other statistical evidence as is available points to the undoubted fact that there has been a very great reduction in habitual or occasional drunkenness.

As was described in the Report for 1917, it had become necessary in 1915-16, from the point of view of the successful prosecution of the war, to institute the strictest control of the Liquor Traffic in certain localities of considerable importance, and this had been done by means of acquisition of the licensed trade interest, and the conduct of the business by the State instead of by private enterprise. Consequently the Board had purchased licences and properties at Enfield Lock, Invergordon and Cromarty, Annan and Gretna, Carlisle and the adjacent parts of

Cumberland. During 1918 this control was continued and, in the interests of the Navy, the direct control area at Invergordon and Cromarty was extended to the town of Dingwall and to both sides of the Cromarty Firth.

A White Paper (Cd. 9187) was issued during the year embodying a Statement of Assets and Liabilities as at 31st March, 1918, together with a Profit and Loss Account. This publication showed that, in view of the various dates at which the Board had acquired their property, they might be estimated to have enjoyed the full use of their assets, which stand in the Account at £1,085,798 8s. 7d., for a period of considerably less than two years, and that there remained, after making generous provision for depreciation, preliminary expenses, &c., a sum of about £240,000, which would be ordinarily available, as the result of the trading for that period, for interest on capital, reserve and carry forward.

The continued progress of this aspect of the Board's work has proved that in the areas concerned strict control of the liquor traffic and financial success are not irreconcilable under conditions of State Ownership with the development of an enlightened and constructive policy.

### **C. Housing.**

In the matter of housing, the year 1918 was one of preparation for the time when the Government could launch their Scheme and authorise building to commence. The information obtained by the Local Government Board from Local Housing Authorities as the result of the enquiry which was undertaken in 1917 had indicated a need for the provision of some 300,000 houses for the working classes after the war, and had shown that the Local Authorities were generally willing to make the necessary provision. The Government had already intimated their intentions as to financial assistance generally, and during 1918 the form and extent of this assistance were laid down and communicated to the Authorities, together with an invitation from the President of the Local Government Board for speedy action in the preparation of schemes. It was subsequently found desirable to modify the form and extent of this assistance materially.

In order to cope with the additional work the Housing Department of the Local Government Board was substantially increased by the appointment of additional inspectors, architects, and administrative and clerical staff.

Investigations into building construction, methods of economy and dispatch in the provision of working class dwellings, the supply of materials, and the modification of building bye-laws, were carried on by Committees appointed by the President of the Local Government Board and the Minister of Reconstruction.

With a view to securing the best possible designs for building, competitions were arranged by the Royal Institute of British Architects, and financed by the Government, who also agreed to subsidise the erection of a small number of houses to illustrate the best of the designs, the necessary arrangements being made by the Royal Institute in conjunction with the Local Government Board and the London County Council. Careful consideration was given to the question of financial assistance to private enterprise, and proposals for the assistance of Public Utility Societies were adopted.

#### **D. Education.**

The Education Bill was introduced into the House of Commons in February, 1918, and received the Royal Assent in August. The full significance of and necessity for reform was emphasised by Mr. Fisher at the Second Reading of the Bill :

“The broad question before the House is whether the education provided for the general mass of our young citizens is adequate to our needs. Let us remember what we have been asking them to do, and what we intend to ask them to do. We have been asking them to fight and work for their country; we have been asking them, not only to appreciate the forces of great political arguments and the significance of grave political emergencies, but to try to turn their appreciation of those arguments and emergencies into acts of renunciation and sacrifice. We have been asking them to die for their country, to economise for their country, to go short of food for their country, to work overtime for their country, to abandon trade union rules for their country, to be patient while towns are bombed from enemy aircraft, and while family after family is plunged into domestic sorrow. We have now decided to enfranchise for the first time the women of this country. I ask then whether the education which is given to the great mass of our citizens is adequate to the new, serious and enduring liabilities which the development of this great world-war creates for our Empire, or to the new civic burdens which we are imposing upon millions of them. I say it is not adequate. Any competent judge of facts in this country must agree with me. I believe it is our duty, here and now, to improve it, and I hold that if we allow our vision to be blurred by a catalogue of passing inconveniences we shall not only lose a golden opportunity but fail in our great trust to posterity.”

The main provisions of the Education Act, 1918, may be summarised as follows :—

Local Education Authorities are required to formulate and submit to the Board complete schemes covering all forms of education for their districts, and are encouraged to combine with other Authorities for certain purposes which require a larger field than is afforded by the area of a single Authority. It is hoped

that in this way a comprehensive system will be evolved affording opportunities to all children and young persons to enjoy the advantages of whatever form of education is best suited to their particular capacities, and securing more effective co-ordination in the provision for Higher Education and in the supply of teachers.

Provision is made for the establishment of Nursery Schools for children under 5 years of age; for the better organisation of Public Elementary Schools by the enacting of a uniform minimum school leaving age of 14, the improvement of the instruction in the higher classes of these schools and the provision of Central Schools or Classes; also for the institution of compulsory part-time Day Continuation Schools at which boys and girls between the ages of 14 and 18, who are not receiving suitable instruction in some other way, will be required to attend for 320 hours a year. Attendance at these schools will be during the day-time, and employers may be required to give their juvenile employees sufficient time off to enable them to be in a fit bodily and mental state to profit by the instruction.

Stress is laid in the Act on the importance of Physical Training in every type of school, so that children may go out into the world developed in body as well as in mind. Encouragement is given to Local Education Authorities to supplement the physical training given in the schools by providing facilities for recreation by means of playing fields, school swimming baths and summer camps. The powers of Local Education Authorities in respect of mentally defective children are extended so as to apply also to physically defective and epileptic children.

Previous enactments relating to the employment of children are amended and new provisions made with a view to securing that no child shall by reason of its employment be rendered unfit to derive the proper benefit from its education. Employment of children (except under certain conditions by their parents) under the age of 12 is prohibited, half-time employment under the age of 14 is abolished, and all employment under that age is strictly limited.

Amongst other provisions of the Act may be noted the abolition of all fees in Public Elementary Schools, the power given to Local Education Authorities to provide maintenance allowances and to make contributions in aid of research, the removal of restrictions on the amount of expenditure of County Councils out of the rates on Higher Education, the power to provide elementary schools outside the Authority's area, and to make arrangements for the education of children in exceptional circumstances. The Board of Education are empowered to collect information as to the educational facilities of all kinds which are provided throughout the country. In addition to this, the system of grants payable by the State to Local Education Authorities has been remodelled and simplified, with a view to securing that, as a general rule, the Exchequer will bear not less than half the

cost of Elementary Education and Education other than Elementary in each area.

The School Teachers (Superannuation) Act, which received the Royal Assent in November, 1918, and came into operation on 1st April, 1919, is also worthy of mention. This Act, which supersedes the previous Acts on the subject, is far more comprehensive, and provides for the granting of superannuation and disablement allowances and of gratuities for teachers in all grant-aided schools and educational institutions (other than Universities and University Colleges) and in other schools which the Treasury may on the recommendation of the Board prescribe. The scheme is non-contributory, and pensions payable will be on the basis of those obtaining in the Civil Service. It is hoped that one of the results of the Act, taken in conjunction with the considerable improvements in salaries which have recently been effected, will be to stimulate the supply of teachers by means of the better prospects held out to them and by the facilities which it affords for movement of teachers from one area or one form of teaching institution to another.

Apart from educational legislation and the ordinary administrative activities of the Board of Education, much time and thought were given to the consideration of problems connected with the war and the period of Demobilisation and Reconstruction. As a result of the critical food situation at the beginning of 1918, steps were taken to provide a largely increased number of Courses of Instruction for Teachers of Cookery and Gardening. The number of school gardens was also largely increased, and every encouragement was given to the production of food and the elimination of waste. The training of munition workers in Technical Schools was carried on on an extensive scale, and it is estimated by the Ministry of Munitions that during the last three years about 50,000 persons have passed into factories through the various training centres. Under arrangements made with the Ministry of Pensions the training of men discharged from the Forces was undertaken in a large number of technical schools with a view to fitting the men for such branches of employment as they would be able to take up.

The President appointed a Standing Committee, including representatives of Teachers and Local Education Authorities, to consider and advise the Board upon applications for admission to Courses of Training for teaching in Public Elementary Schools received from disabled soldiers and others who have served in His Majesty's Forces and have not passed any of the examinations ordinarily accepted as qualifying for admission to such courses. Courses of Training have been specially established at certain University Training Departments and other Training Colleges. The Officers' University and Technical Training Committee was

appointed by the President of the Board of Agriculture, the President of the Board of Education, the Minister of Labour, and the Minister of Pensions "to advise the Departments upon such courses of Education and Training as it may be desirable to arrange for the benefit of officers and ex-officers of H.M. Forces and men of like standing, particularly with a view to fitting them for suitable employment after the war, to consider any general questions arising in connection with such Education and Training, and when necessary to advise individual officers as to suitable Courses of Training." Another Committee was appointed in July, 1918, to prepare a draft of a National Scheme of Training for the Sea Service with the object of maintaining a supply of well-trained British Seamen, regard being had to the provisions of the Education Act, 1918. A number of measures also have been initiated with a view to mitigating the hardship inflicted on young men whose courses of study were interrupted owing to their joining the Army and to make good to juveniles, who were prematurely withdrawn from school and absorbed in industry, the educational loss which they had sustained.

*Education within the Army.*—In August, 1918, the War Office established a new branch in the Directorate of Staff Duties to direct and co-ordinate the educational scheme of the Army. They also issued an Army Order giving details of the scheme, and this Order anticipated many of the recommendations of the Adult Education Committee of the Ministry of Reconstruction whose second Report on "Education in the Army" was issued in November, 1918. The Branch was charged with the co-ordination of all educational classes and lectures for the troops at home and in the theatres of war overseas; with the supply of text-books for classes and reference libraries for the use of students; and with maintaining touch with the Mobilisation Directorate, with the Ministries of Labour, Reconstruction and Pensions, and other Government Departments, so that information might be collected and disseminated for the guidance of Education Officers, and, through them, of the troops on subjects connected with their return to civil life. At the same time a framework of organisation in the Forces of Great Britain, France and Italy was set up, by which officers were appointed in each formation and in the principal bases and camps to supervise the work.

In December, 1918, a fresh Army Order was issued greatly extending the scope of the scheme in the Forces of Great Britain, France and Italy, making provision also for the Forces in Ireland, Salonika and Egypt, and among patients in the military hospitals in Great Britain, detailing arrangements made for the co-operation of the local education authorities, grouping subjects of study and instituting certificates. By the end of the year between two and three million soldiers were under instruction.

The Army Commanders in France have testified to the high value of the work which has been carried out.

## CHAPTER XVI.

**RECONSTRUCTION.**

In the Report of the War Cabinet for the year 1917 an account was given of the various steps which had been taken up to the beginning of the year 1918 to prepare for and deal with the problems of Reconstruction. Since that date the Ministry of Reconstruction has presented to Parliament a report of its proceedings up to 31st December, 1918, recording what has been accomplished by the various Committees and Sub-Committees, as well as the administrative action which has been adopted. Furthermore, a large number of special reports from the various Committees on Reconstruction have also been published, and a series of pamphlets has been issued by the Ministry for the purpose of informing public opinion on various aspects of reconstruction. It is not, therefore, necessary on this occasion to do more than draw attention to the main developments in 1918 in the activities of the Ministry of Reconstruction. Already in other chapters of the present Report, especially those dealing with Industrial Relations, with Demobilisation and Resettlement and with Social Welfare, reference has been made to important parts of the programme which have been carried out or were in process of being put into operation.

In Reconstruction the general character of the work of the past year has been that of bringing to completion the inquiries which had been set on foot in the preceding years, of providing in certain cases for additional investigation, and of formulating in association with the Departments concerned the measures for carrying out the many-sided tasks of national reconstruction. In order to understand the work of the Ministry it has throughout to be borne in mind that a main feature in its policy has been that of co-operating with the various Departments of State in working out schemes which could be put into practical operation. Unquestionably, for this vital purpose and at this later stage of procedure, the institution of a Ministry in place of a Committee has proved of great advantage. It was pointed out in the previous War Cabinet Report that the establishment of a Ministry of Reconstruction had been found necessary, and reference was made to the functions and organisation of the new Ministry and to the constitution of a representative Advisory Council which was appointed in January, 1918. The work of this Advisory Council has proved of the highest importance during the year.

Early in the year it appeared that the general ground for investigation in connection with matters of immediate importance for reconstruction purposes had been adequately mapped out by the initiation of appropriate Committees, or by enquiries on the part of the responsible Executive Departments or the Reconstruction Department acting in consultation with them. It was

clear, however, that if full and timely advantage was to be taken of the information thus collected, suitable machinery should be created within the Ministry itself for focussing the results of such enquiries into definite proposals for immediate action or comprehensive schemes for the approval of the Government. The Minister accordingly initiated in March a reorganisation of the work and staff of the Ministry to this end; and it was a main feature of this reorganisation that full use should be made of the great practical experience in various directions possessed by the distinguished men and women who were members of the Advisory Council created by the Minister at the beginning of the year.

Under this scheme the responsibility for the policy and administration of the Ministry was centralised in the Minister and a Secretary acting under his immediate instructions. The work of the Department was distinguished between a General Branch (dealing with matters of organisation and miscellaneous questions) and five Administrative Branches, each dealing with a definite range of subjects and working in close co-operation with an appropriate section of the Advisory Council. Further, in order to secure better co-ordination and ensure that any enquiries conducted by Sections or Sub-Committees of the Advisory Council should be directed to definite and practical points, arrangements were made for the Chairmen and Vice-Chairmen of the several Sections of the Advisory Council to hold weekly meetings for the purpose of advising the Minister on the most practical method of approaching large and complicated problems and giving general advice informally on specific questions of difficulty arising in the course of the daily work of the Ministry. A similar informal Committee, composed of women members of the Advisory Council, likewise met each week to give the Minister similar advice on aspects of questions affecting the special position or interests of women.

The following record summarises the main subjects of enquiry and action with which the Ministry has been specially concerned during the past year.

*Emergency Legislation.*—The necessary measures for revising war emergency legislation, in view of the necessity of continuing certain of the emergency measures into the reconstruction period, were fully considered. A Committee, appointed by the Attorney General in consultation with the Minister of Reconstruction, reported on the legal meaning of the phrase "termination of the war," both in Statutes and private contracts. The Reports of this Committee were referred to a Select Committee of the House of Commons, to consider what provision should be made by Parliament to define the phrase "end of the war." The Select Committee issued an Interim Report advising that the date in question, in relating to Emergency Legislation, should be the date on which the Treaty of Peace is finally binding on the



respective belligerent parties. The Minister of Reconstruction introduced a Bill to give effect to the recommendations of the Select Committee and to extend them to contracts as well as emergency legislation; and this became law in the Termination of the present War (Definition) Act, 1918. The Select Committee also proceeded with the question of the continuance of emergency legislation after the termination of the war, and received much assistance from the Ministry of Reconstruction for that purpose. The work could not, however, be completed before the end of the Session, and arrangements were made for the matter to be pursued by a Committee of the Government Departments concerned, with a Chairman of Cabinet rank.

*Demobilisation of the Forces.*—The general lines of the policy of demobilisation were the subject of Reports by a Committee under the Chairmanship of Mr. Montagu, which commenced its labours in 1916 as a Sub-Committee of the Cabinet Reconstruction Committee and subsequently became a Committee of the Ministry of Reconstruction. It was arranged that the order of discharge should depend upon the needs of industry at the end of the war, due regard being had to the claims of long service men and married men to early release. The details of a plan for demobilisation were left for the Executive Departments concerned (War Office, Admiralty, Air Ministry and Ministry of Labour) to work out. Due measures were taken to secure co-ordination between the Committees of the different Departments engaged upon this task; and, at the cessation of hostilities, a Committee of the War Cabinet, under the Chairmanship of General Smuts, was appointed to supervise and control the policy of demobilisation and resettlement. But, apart from questions exclusively within the sphere of one of the executive departments in question, a number of problems arose, affecting the work of more than one Department; and in the co-ordination and solution of these the Ministry of Reconstruction co-operated closely with the executive Departments concerned, *e.g.* :—

- (i) *Priority of Demobilisation* was settled on lines that provided for the release firstly of demobilisers (*i.e.*, those required to set the demobilisation machine in motion), secondly of “pivotal men” (*i.e.*, those essential for setting in motion particular industries), and thirdly, “slip men” (*i.e.*, men for whom definite offers of employment were waiting), preference being given within each group to long service men and to married men over single.
- (ii) *Out-of-Work Donation for Ex-Service Men.*—A scheme of Out-of-Work Donation for ex-service men was adopted on the recommendation of the Army Demobilisation Committee, and after enquiry was extended to mobile members of Women’s Corps. The

rate was reviewed in the light of the subsequent rise in the cost of living, and the scheme was co-ordinated with the scheme for Out-of-Work Donation to civil war workers.

- (iii) *Employment of Disabled Soldiers*.—Section III. of the Advisory Council reported upon action to be taken with a view to preventing an abnormal amount of unemployment among partially disabled soldiers, and under-payment of men unable to earn a standard rate.
- (iv) *Interrupted Apprenticeship*.—A full investigation was made by the Ministry into the various conditions affecting apprenticeship interrupted by the war. A policy was adopted which accepts the principle of payment by the State of at least part of the difference which the apprentice would have received in view of the fact that he was only partially trained, and a wage comparable to that which he could obtain in other forms of employment.
- (v) *Officers' Resettlement*.—The resettlement of officers was considered by a Sub-Committee of Mr. Montagu's Committee. Later the Officers' University and Technical Training Committee was set up, and the Ministry of Labour appointed an Advisory Committee on Officers' Resettlement, an Appointments Department being opened under the Ministry of Labour to assist the resettlement of officers in civil life.
- (vi) *Civil Liabilities*.—On the recommendation of the Army Demobilisation Committee, a scheme was prepared by the Local Government Board for providing financial assistance in cases where reasonable claims would not be met by the payment of Out-of-Work Donation, especially with a view to the restoration of "one man" businesses.

*Civil Resettlement*.—Special attention was given to this complex problem, and a general memorandum on resettlement was prepared, which formed the basis of the policy adopted by the Government. The following were the main special arrangements made by the Ministry of Reconstruction :—

- (i) *Civil War Workers' Committee*.—A Committee, including representatives of employers and employed, and also of the Government Departments concerned, was appointed to report upon the arrangements which should be made for the demobilisation of workers engaged during the war in national factories, controlled establishments and firms engaged on Government contracts, or employing substitute labour. The Committee submitted six reports which were con-

sidered in connection with memoranda and proposals arising out of other investigations into cognate subjects.

- (ii) *Out-of-Work Donation*.—An extended scheme of unemployment insurance was recommended by the Civil War Workers' Committee, and considered in consultation with the Ministry of Labour. As, however, time would not permit of the lengthy negotiations with representatives of employers and employed necessary for an extension of the existing contributory scheme to meet the conditions of the transitional period, the Ministry of Reconstruction prepared a non-contributory scheme, and, with certain modifications, the proposals relating to Out-of-Work Donation to ex-service men were amalgamated with it.
- (iii) *Restoration of Trade Union Practices*.—The Ministry collected information in regard to changes in Trade Union practices from the Ministry of Munitions, and by special investigations in regard to new conditions prevailing in the Engineering Industry. A Draft Bill for the restoration of pre-war practices was prepared by an Interdepartmental Conference set up by the Minister of Reconstruction.
- (iv) *Regulation of Wages*.—In conjunction with the Ministry of Labour and Ministry of Munitions, a review was made of the conditions prevailing during the war in regard to wages, and an enquiry was instituted into the effect of the operation of awards and orders under the Munitions Acts upon the Post-war situation. The Minister of Reconstruction set up a Committee known as the Wages Awards Committee, and their report formed the basis of the Wages (Temporary Regulation) Act, 1918.
- (v) *Juveniles in Industry*.—Owing to the fact that, under war conditions, large numbers of juveniles had entered occupations earlier than they would otherwise have done, provision had to be made against unemployment in this class on the return of adult workers. A report based upon reports collected by the Ministry of Labour was published, and its recommendations have been partly adopted by the Government. An enquiry was also conducted by a Sub-Committee of Section III. of the Advisory Council, on the question of further legislative action to restrict the hours of labour of children and young persons in those occupations now unregulated by law.
- (vi) *Resettlement Co-ordination Committee*.—In order to avoid overlapping, and secure the greatest measure of

co-operation in transitional labour questions, particularly in regard to resettlement problems, the Minister set up a Civil War Workers' Resettlement Co-ordination Committee (under the chairmanship of the Secretary to the Ministry) consisting of representatives of the Departments concerned. This Committee worked in close touch with the Demobilisation of the Forces Co-ordination Committee, and met regularly up to the time of the appointment of the Cabinet Committee under General Smuts, on the signature of the armistice.

*Industrial Relations.*—The principles of the Report of the Whitley Committee, which was a Sub-Committee of the original Reconstruction Committee, on the relations of employers and employed have been adopted by the Government as part of their policy of industrial Reconstruction as administered by the Ministry of Labour. Pending the formation of Joint Industrial Councils in certain trades, there was pressing need for interim organisations to secure the effectual handling of immediate problems by the industries themselves. By arrangement with the Ministry of Labour and the Board of Trade, a special section of the Ministry of Reconstruction undertook to deal with negotiations and arrangements for the formation of such Interim Reconstruction organisations. It was an accepted principle that the formation of such Interim organisations should lead up to, and not be in substitution for, the formation of Joint Industrial Councils at the earliest practicable moment; and that new organisations should not be created in any trades where there were existing organisations capable of discharging the duties immediately necessary. Working upon these lines, the Trade Organisation Section of the Ministry secured the formation of Interim Reconstruction Committees representative of employers and employed in nearly forty industries. Reports were obtained from Section III. of the Advisory Council as to the practical application of the principles of the Whitley Report to the Engineering and Railway industries, and the extent to which agreements could be made mandatory. Enquiries and negotiations in the Shipping industry resulted in the setting up of a Committee of the Associations concerned to consider the establishment of an Industrial Council in this industry.

*Conditions of Employment.*—The Labour Panel of the Engineering Trades (New Industries) Committee produced a Report on the conditions of employment which should obtain in the new industries, and various other enquiries into different phases of the same problem have been made by the Ministry. The Committee on Women's Employment, which was originally appointed as a Sub-Committee of the Reconstruction Committee, continued its labours under the Ministry, and memoranda by groups of members acting as Sub-Committees on certain subjects have been received and followed up.

*Adult Education.*—The Adult Education Committee in their first report dealt with social and industrial conditions in relation to Adult Education; and in their second report dealt with education in the Army; a third report on Libraries and Museums was also prepared, and the final report of the Committee was in course of preparation at the end of the year.

*General Industrial Policy.*—Among subjects which have been investigated, in consultation with the Departments concerned, are the extension of Labour Legislation, the prevention of unemployment and the extension of unemployment insurance, international labour legislation, industrial courts, pensions for widows, State control in industry, the future of women in industry, and the health of industrial workers.

*Raw Materials.*—A Committee was appointed, shortly after the establishment of the Ministry, to survey the general problem of raw materials. Later, Sub-Committees under members of the original Committee were appointed to pursue, in the case of specific materials, the question of the requirements of the United Kingdom, and any necessary measures of control. The position of the Building Industry after the war, particularly in regard to materials, was made the subject of an exhaustive enquiry by an expert Committee. Close touch was also kept with the Ministry of Shipping in view of the vital connection between shipping and the raw materials problem. A programme of imports for the principal raw materials was prepared by the Ministries concerned, in consultation with the Ministry of Reconstruction, and was put into operation immediately following the signature of the Armistice.

*Post-War Priority.*—A Report was obtained early in the year from Section II. of the Advisory Council on the principles for allocating materials, power and transport facilities, in the event of a shortage; the Government decided forthwith to establish a Post-War Priority Committee, consisting of Ministers, and a Standing Council parallel to the then existing War Priorities Committee and its permanent Sub-Committees. The Council was composed of representatives of Industry, Commerce and Labour, with representatives of certain Government Departments directly concerned. An instruction was given that the central control of all relevant Departmental controls (with the exception of that exercised by the Ministry of Food) should, after the declaration of an Armistice with Germany, devolve upon this Post-War Priority organisation. In practice it proved possible through the operation of this organisation to remove or relax substantially controls in the case of many commodities immediately following the signature of the Armistice.

*Imperial Mineral Resources Bureau.*—Following the Report of a Committee appointed by the Minister of Munitions and a resolution of the Imperial War Conference in April, 1917, arrangements

were made by the Ministry of Reconstruction for the formation of an Imperial Mineral Resources Bureau in London, for the purpose of collecting information regarding the mineral resources and metal requirements of the Empire, and advising upon the development of such resources. A scheme was submitted to the Imperial War Conference in April, 1918, and approved after discussion by them. Under this scheme the Bureau will be attached to the Privy Council, and the administration will be controlled by a governing body representing the different parts of the Empire, as well as the mineral, mining and metal industries. Arrangements have been made for the Bureau to be incorporated by Royal Charter, defining its constitution and duties.

*Commercial Organisation.*—Following the receipt in February, 1918, of Lord Balfour of Burleigh's Committee's Report upon Commercial and Industrial policy after the war, certain outstanding points were further investigated, through the agency of the following Committees appointed by the Ministry of Reconstruction :—

- (i) The question of necessary action to protect the public interest in view of the probable extension of Trade Organisations and combinations has been examined by the *Committee on Trusts*.
- (ii) The appropriate constitution of the *Essential Industries Board* suggested by Lord Balfour's Committee has been reported on by a Sub-Committee of Section II. of the Advisory Council.
- (iii) The question of the precise measures to be taken to give effect to the recommendations of Lord Balfour's Committee in regard to *Anti-Dumping* has been referred to, and reported upon by, Section II. of the Council.
- (iv) The same Section of the Advisory Council considered measures to give effect to the view of Lord Balfour's Committee that provision should be made to protect the producers of this country against the importation of "*Sweated Goods*."
- (v) The question of amendment of the *Companies' Acts*, 1908-1917, was dealt with in a report submitted by a Committee appointed jointly by the Board of Trade and the Ministry of Reconstruction.

*Establishment of New Industries after the War.*—Special attention was paid to the Engineering Trades, which have suffered exceptional dislocation under war conditions. Following the general recommendations of a Board of Trade Committee on the Engineering Trade, the Ministry of Reconstruction appointed an expert Committee known as the Engineering Trades (New Industries) Committee. This Committee, after compiling lists of

articles suitable for manufacture in the Engineering Trades and by different classes of labour, and setting out the new industries to which such manufacturers could be suitably attached, recommended (i) the establishment and development of such industries by the transfer of labour, machines, etc., and (ii) the methods and organisation requisite for such transfer. Branch Committees were set up to deal with these matters in 15 important sections of the Engineering Industry; and the Committee had the advantage throughout of the assistance of a Labour Advisory Panel. All the Branch Committees reported, and the report of the Main Committee, based upon them, has been published.

*Development of Power for Commercial Purposes.*—The various reports dealing with aspects of this question were considered in the Ministry, and a report was obtained upon the general administrative problem in particular as it affected the development of electric power from the Chairmen of the Advisory Council. As regards the question of Water Power, representatives of the Ministry co-operated actively in the enquiries conducted by the Water Power Committee appointed by the Board of Trade. The Coal Conservation Committee presented their final report in January, 1918, submitting the reports of their several Sub-Committees. Following the reports of the Carbonisation and Metallurgical Sub-Committees the Fuel Research Board was established by the Department of Scientific and Industrial Research.

*Internal Transport.*—Early in the year comprehensive memoranda were prepared on various aspects of the internal Transport problem (particularly canals and Light Railways of a gauge suitable for rural transport), and a report was obtained from Section I. of the Advisory Council on the standardisation of railway equipment. The Chairmen of the Advisory Council were then asked to report upon the best method of approaching the question of the general co-ordination of Transport facilities in the United Kingdom; and it was subsequently agreed that the whole question should be further pursued in the first instance by the Select Committee of the House of Commons on Transport, who have been supplied with information collected by the Ministry.

*Storage Questions.*—The difficulties in relation to Storage at ports and transit centres which had to be faced on the cessation of hostilities were considered by a Committee appointed by the Minister of Reconstruction, and including representatives of other Departments concerned. This Committee, known as the Storage and Transit Committee, was subsequently given executive powers, administered under the supervision of the Board of Trade.

*Disposal of War Stores and National Factories.*—A Surplus Government Property Advisory Council was appointed by the Minister of Reconstruction to prepare inventories of such property and advise upon their disposal; and in March the functions of the Council and also of a Surplus Property Disposal Board to

give effect to their recommendations, were defined by Order in Council. Much valuable work was done by this organisation ; but difficulties arose in operation, owing to the divided responsibilities of the Disposal Board to the different executive Departments concerned in the actual work of disposal. The Ministry of Reconstruction, owing to lack of necessary legal powers, was unable to undertake the comprehensive supervision of such executive work ; and the responsibility for disposal of stores was accordingly transferred to the new Ministry of Supply, operating through a staff obtained from the Ministry of Munitions.

*Post-War Finance.*—Arrangements were made by the Ministry of Reconstruction, in consultation with the Treasury and other Ministries concerned, for a comprehensive survey of the main problems of post-war Finance in relation to industry, by the appointment of three important Committees on :—

- (1) The question of Currency and Foreign Exchanges.
- (2) The general question of Financial facilities.
- (3) The question of the Financial Risks attaching to the holding of Trading Stocks.

The Reports of these Committees were published during the course of the year, also a Report was obtained from Section I. of the Advisory Council upon the effect of the Excess Profits Duty on Industry generally.

*Land Acquisition.*—The Committee appointed to deal with existing defects in the law and practice relative to the acquisition and valuation of land for public purposes issued a First Report in January, 1918, recommending a wide extension and simplification of the existing machinery for obtaining compulsory powers in the case of schemes by Government Departments, Local Authorities and Private Promoters involving the acquisition of land ; and, in a Second Report, dated November, 1918, they recommended the repeal of the Lands Clauses Acts, and the adoption of cheaper and more uniform methods for valuation in case of compulsory acquisition. They have also been dealing, by way of specially strengthened Sub-Committees, with acts relative to Mining Way-leaves, Riparian Rights, Common and Highway Rights, and certain Coastal Questions, where existing restrictions are inimical to the development of the nation's resources, and with the important question of the simplification of Land Transfer. The Committee proposed to deal in a final Report with the general machinery and principles of valuation of land for taxation, rating and other public purposes.

### **Rural Development.**

*Reports of the Agricultural Policy Committee.*—The first Report of this Committee (under the Chairmanship of Lord Selborne) was immediately made operative by means of the Corn Pro-



duction Act, 1917, which was passed as an emergency measure. The Second Report of this Committee, submitted on 30th January, 1918, contained proposals for re-organisation of Departments dealing with agriculture, extended provision for agricultural instruction and research, agricultural organisation and credit facilities, Tithe Redemption, Small Holdings, Village Reconstruction, Land Reclamation, Plant Pathology, Agricultural Transport. On many of these matters investigations have been continued by the Ministry in conjunction with the Board of Agriculture. The question of Tithe Redemption was dealt with in the Tithe Act, 1918.

*Rural Industries and Village Reconstruction.*—A large amount of information was collected on the general question of Rural Reconstruction, and a scheme prepared covering the provision of Village Hall and Recreation Rooms, and increased amenities of rural life. A special investigation has been made into the conditions and possibilities of developing rural industries.

*Rural Transport.*—The difficulties of Transport in Rural areas have been considered in consultation with expert authorities and other Departments concerned. Special attention was given to proposals for the development in such areas of narrow gauge Light Railways as a result of the experience acquired in this connection during the war. Proposals have been submitted to the Board of Trade for establishing a central authority to deal with the matter.

*Forestry.*—The Report of the Forestry Committee was considered in the Ministry and an Interim Forestry Authority has been set up.

*Settlement of Ex-Service Men on the Land.*—This question was taken up immediately on the formation of the Ministry; and schemes were prepared for comprehensive measures to meet the requirements of ex-service men who might desire to be settled on the land, additional to the provisions of the Small Holdings (Colonies) Act, 1916, which made 8,000 acres available for training and experimental settlement of ex-service men in farming colonies on a co-operative basis.

- (i) It was proposed in May, 1918, as the result of joint deliberations by the Ministry of Reconstruction and the Board of Agriculture that power should be taken to acquire (by compulsion if necessary) large areas of land for the purposes of soldiers' settlements, small holdings, forestry, reclamation and rural housing. The Ministry recommended that action on this matter should be taken so far as possible through the ordinary machinery of the County Councils, under the Small Holdings Acts, on the basis of an annual payment guaranteed by the State. These proposals were considered and approved by a Cabinet Committee, and a

Small Holdings and Allotments Bill incorporating them was introduced into Parliament. The sudden developments in the military situation, however, made it necessary to provide at once for the acquisition of land necessary for soldiers' settlements by cash payments, in order to avoid the delay incidental to negotiations or compulsory proceedings on an annual payment basis. Revised proposals were accordingly prepared, and accepted by the Government, for the provision of a capital sum calculated to meet all requirements (both as regards land, equipment and training) for the settlement of ex-service men.

- (ii) Concurrently with these arrangements steps were taken to consider suitable methods for making rural life attractive to ex-service men; and Section IV. of the Advisory Council were asked to report upon the question. They submitted Interim Memoranda on various points; and their Final Report (which was submitted and published in December, 1918) recommended, *inter alia*, the immediate establishment of a Central Executive Committee for dealing with different aspects of the general problem of settling ex-service men on the land, and providing facilities for their training and allocation for such employment.

*Economic Position of Women in Agriculture.*—Arrangements were made, in consultation with the Women's Employment Committee and Departments concerned, for this subject to be pursued by Sub-Committees of Section IV. of the Advisory Council.

*Miscellaneous.*—A report was obtained from Section IV. of the Advisory Council in regard to the establishment of Rural Information Offices at suitable centres, and recommendations based on this Report were made to the Board of Agriculture. Various questions of land reform have been considered, and County Councils have been invited to furnish information in regard to schemes in connexion with Rural Reconstruction that come under the notice and the particular requirements of the respective localities.

*Fisheries.*—A Standing Conference, including representatives of the English and Scottish Fishery authorities and the Development Commissioners, met periodically at the Ministry of Reconstruction to review the steps necessary for the early reinstatement of the Fishery industry after the war. With the assistance of associations of fishermen and manufacturers, complete estimates were made of the equipment required for reinstating the industry and creating a reserve. A Report was also prepared on the administration of Fishery Harbours.

## Social Development.

*Ministry of Health.*—One of the most important subjects which engaged the attention of the Ministry of Reconstruction during 1918 was the proposal for the immediate establishment of a Ministry of Health. The duty of conducting negotiations and enquiries on behalf of the Government was entrusted to the Minister of Reconstruction, who, in addition to the necessary inter-Departmental communications, held a series of conferences with Associations of Local Authorities, of the Medical profession, of Insurance Committees and Approved Societies engaged in the administration of the National Health Acts.

In the course of these negotiations general agreement was reached as to the desirability of securing the establishment of a Ministry of Health as well as upon the lines of the necessary legislation. Discussion then centred upon the problem of the steps to be taken on the establishment of the Ministry as regards the Poor Law system administered by the Local Government Board. It was agreed that the provision for the sick and infirm which had grown up under the Poor Law system should, as soon as possible, be made part of the duties of the Ministry of Health. On the other hand, there were strong objections to associating the work of that Ministry with the Poor Law provisions for poor relief, and with able-bodied necessitous persons. This aspect of the question was reported on by a Committee presided over by Sir Donald Maclean. As a result of the negotiations undertaken by the Ministry, a draft was prepared by the Home Affairs Committee of the War Cabinet and the Ministries of Health Bill was introduced by the Minister of Reconstruction on 7th November, 1918. In introducing the Bill, Dr. Addison explained that the main purpose of the Bill was to bring together, under one body of men and one Minister, the chief Government Departments concerned in matters affecting the health of the people. The Bill did not provide medical treatment for any individual, or affect the functions of any Local Authority in any way. It brought together under one Minister the powers and duties of the Local Government Board and Health Insurance Commissions of England and Wales, the powers and duties of the Board of Education in regard to the health of mothers and infants, the duties of the Privy Council in regard to midwives, and of the Home Office in regard to the protection of infant life. Power was taken to bring in, as and when possible, the medical inspection and treatment of school children now under the charge of the Board of Education, the health duties of the Ministry of Pensions in regard to sick soldiers and the powers of the Home Office in regard to lunacy and mental deficiency. The bringing together of these services in no way affixed to them any Poor Law taint whatever. The Government had accepted the recommendations of Sir Donald Maclean's Committee that all services relating to the care and treatment of the sick and infirm should not be

administered as part of the Poor Law, and regarded it as urgent to give effect to these recommendations as soon as possible. They also accepted the principle that the remaining functions of the Poor Law Authorities should be transferred to other bodies, but were not in a position at present to formulate precise proposals. An important feature of the Bill was the provision of Advisory or Consultative Councils as part of the machinery of the Ministry.

*Housing.*—In co-operation with the executive Departments concerned, the Ministry of Reconstruction devoted particular attention to the collection of information and to the preparation of schemes for dealing with the housing problem. Special enquiries into special aspects of the question have been conducted by the following Committees appointed by the Ministry :—

- (i) An Advisory Housing Panel undertook a general review of the housing question, as it would present itself at the end of the war, and submitted a memorandum of their conclusions, which was published in July, 1918.
- (ii) The question of the supply of building materials was dealt with by a Committee, who reported in November, 1918, on the position of the building trade after the war.
- (iii) A Committee was appointed, in consultation with the President of the Local Government Board, to consider whether financial facilities could be granted to persons and bodies other than Local Authorities to enable them to build workmen's houses after the war, and presented in October, 1918, an Interim Report on Public Utility Societies; they have since submitted their Final Report.
- (iv) A Committee appointed to consider steps for dealing with any difficulties arising on the Increase of Rent and Mortgage (War Restrictions) Act, 1915, have also presented their Report.
- (v) A Sub-Committee of Section V. of the Advisory Council of women appointed to consider the various types of workmen's houses likely to be erected after the war, with special reference to the convenience of the housewife, presented an Interim Report in May, 1918, and their Final Report was submitted and published early in 1919.

*Questions affecting the Position of Women.*—In addition to the Women's Housing Committee above mentioned, Sub-Committees of Section V. of the Advisory Council were appointed to report on certain questions specially affecting the position of women as follows :—

- (i) A Committee was appointed to consider and has reported upon the co-ordination of the various authorities dealing with the vocational training of women.
- (ii) A Committee was appointed to consider the position created by the termination of engagements of women holding temporary appointments of an administrative as well as a clerical nature in the Civil Service during the war, especially in regard to possible openings for women in the permanent Civil Service. This Committee has reported, and their report has been communicated to the Treasury Committee (under the presidency of Lord Gladstone), who are considering the general question of recruiting for the Civil Service under the conditions arising from the war.
- (iii) A Committee was appointed to consider the broad principles which should govern the extended employment of properly paid and trained women on Health and kindred services, and the conditions of organisation and training under which the assistance of voluntary women workers can usefully be employed in this connection.

*Machinery of Government Committee.*—The general problem of considering any necessary improvements in the central machinery of Government and the distribution of functions between Departments was comprehensively examined by a Committee under the presidency of Lord Haldane, which reported in December, 1918. The Report, which has been published, was divided into two parts, the first dealing with the general principles suggested for adoption in Government Departments, the second illustrating in separate chapters the application of these principles.

*Local Reconstruction Organisations.*—The general and increasing interest in Reconstruction problems has given rise to the growth in different parts of the country of various local Committees and Reconstruction organisations for the purpose of studying these questions and securing the co-operation of the various classes and interests in regard to points of particular importance in the particular locality. A joint Sub-Committee of sections IV. and V. of the Advisory Council was appointed to consider the methods by which the Ministry of Reconstruction could most usefully assist the work of these Local Reconstruction organisations, on the assumption that such organisations should be of spontaneous growth, and should develop on the lines best adapted to local conditions, independently of any direct control or official sanction by the Ministry.

### Conclusion.

Such is, in brief outline, a summary of the main tasks approached or accomplished by the Ministry of Reconstruction

in the past year. It may be claimed that, even as regards results already achieved, the Ministry has justified its existence. Few people who soberly consider the extent of the ground generally covered by the work of the Ministry, or patiently study the material collected on specific points in the published Reports of its Committees, will be disposed to question this. The vision of National Reconstruction, perplexed and inchoate as it must at present appear in certain aspects, has still assumed more definite and living form as a result of the work of this organisation in the course of the last twelve months.

As regards the problems arising immediately on the cessation of hostilities, a complete plan for the demobilisation of the Forces was systematically worked out. The fact that it required re-adjustment in certain particulars, owing to the unforeseeable conditions in which the Armistice was concluded, was an accident inevitable in the case of any scheme necessarily dependent upon a number of imponderable factors. For the dispersal and resettlement of the Army of Civil War Workers full preparation had also been made, subject to the like conditions. The rapid release of raw materials, to which the Post-War Priority Organisation set up by the Ministry has contributed, was a measure of vital importance to the rapid restoration of industry. The wages position in the more important industries was regulated for the time being by the passing of the Wages (Temporary Regulation) Act, 1918, on the recommendation of the Ministry; and steps have been taken for early legislation on the question of restoring Trade Union practices. Complete schedules of public works held back by the war have been prepared, with a view to meeting temporary demands for employment. Schemes were prepared for the settlement of ex-service men on the land; and legislation has been put in hand to provide them with the necessary facilities in land, equipment and training.

With regard to provision for the rehabilitation of commerce and increased production during the transitional period, the Port and Transit Authority, initiated by the Ministry, has been dealing successfully with the problem of releasing storage accommodation at the ports. The Engineering (New Industries) Committees have proved a practical and valuable machinery for restoring and extending the operations of the great industry which has been most severely dislocated by war conditions. Interim Trade organisations for dealing with transitional problems have been set up in a number of industries where no suitable organisation for the purpose already existed. The general recommendations of Lord Balfour of Burleigh's Committee have been carried a practical step farther in several important directions. Provisions for the restoration of national credit, and financial facilities for commerce, have been worked out by expert Committees. The conservation of our national coal supply has been made the subject of searching investigation; and a new organisation has

been created for systematic research in connection with the mineral resources of the Empire. The development of electric and water power for commercial and other purposes has been exhaustively pursued, and schemes upon a national basis have been prepared in this connection. The Reports of Lord Selborne's Agricultural Policy Committee have been followed up, and various schemes have been prepared or special investigations conducted with a view to giving practical effect to their recommendations. Measures have been taken for a large extension of the policy of smallholdings; and enquiries have been conducted with a view to the development of rural industries. The question of the transfer of land for public purposes has been comprehensively considered; and proposals for a simplified procedure and an equitable method of valuation have been prepared with a view to liberating both agricultural and commercial enterprise from impediments encountered under the existing system.

As regards the wider questions of measures for the permanent amelioration of the conditions of social and industrial life in the United Kingdom, much of the work done in the Ministry has necessarily been confined to preparation and investigation; without so far reaching a point of positive achievement, or the formulation of proposals for immediate legislation. But the Ministries of Health Bill introduced by the Minister of Reconstruction in the course of the year marked a new epoch—not only in the public provision for the health of the nation, but also in the whole machinery of Local Government in this country. Important proposals have also been formulated affecting the central machinery of executive Government. The lines of a great Housing problem have been developed as a result of mature deliberations and far-reaching enquiries, in which the Ministry has taken a very active and practical part. Equally, in the field of permanent industrial policy, the reports of the Whitley Committee represent the commencement of a new era in the relation of employers and employed, and the development of a constructive ideal which has been carefully watched and fostered. The fundamental questions of Adult Education and Juvenile Employment have been advanced a stage further by reports formulated within the Ministry in the course of the year; and the changed conditions of industrial and social life, as affecting the position of women, have been comprehensively reviewed by means of an organisation in which women themselves have been assigned a very prominent place.

Finally, the Ministry of Reconstruction may claim to have played its own part in the practical realisation of an idea fraught with infinite possibilities for the future of the nation—the idea of organised thinking and common thinking, as applied dispassionately to the complex problems of social progress and national development in this country. Departmentally, the Ministry has not attempted to pursue an *a priori* policy of its own,

but rather to correlate the proposals of the individual Departments into a consistent whole by adjusting margins and filling in gaps. Still less has the Ministry sought to impose upon the nation at large any cut and dried scheme of reconstruction. It has endeavoured rather to give the members of the general public adequate opportunity and materials to co-operate in the great task of National Reconstruction themselves. On the Committees and Council of the Ministry men and women, employers and employed, the specialist and the man of affairs, have consulted freely and frankly, with full access to all official sources of information. The results of their deliberations have been communicated to the outside public, either by the early publication of the reports actually received, or by the preparation of pamphlets summarising the progress made on each subject up to date. How far the germ of common thinking has fructified in the case of those who have actually co-operated in the work of the Ministry may be inferred from the series of practically unanimous reports upon complex and normally contentious subjects which have been submitted by Committees including members of widely different experience and divergent points of view.



## CHAPTER XVII.

**FINANCIAL SUMMARY.****INTERNAL FINANCE.****Loans.***National War Bonds.*

The policy of steady day by day borrowing, represented by the issue of National War Bonds, was followed throughout the year with remarkable success. The first series, issued in October, 1917, and maturing in October, 1922, 1924 and 1927, were replaced in April, 1918, by a second series, maturing six months later, but otherwise identical in terms, and these again by a third series, issued on 30th September, 1918, and maturing in September, 1923, 1925 and 1928. The issue price of the Four per Cent. Income Tax Compounded Bonds, originally issued at par, was raised to £101 10s. per cent. in view of the increase in the rates of Income Tax proposed in the Budget.

The following statement presents in tabular form the results achieved by this method of borrowing :—

Amount applied for.	Through Bank of England. £	Through Post Office. £
From start of issue to 31st December, 1917 ...	198,754,450	11,616,000
For quarter ended 31st March, 1918 ... ..	412,438,900	13,483,000
For quarter ended 30th June, 1918 ... ..	206,329,000	7,075,000
For quarter ended 30th Sep- tember, 1918 ... ..	272,161,150	7,025,000
For quarter ended 31st De- cember, 1918 ... ..	303,715,100	9,459,000
Total ... ..	1,393,398,600	48,658,000

The total to the withdrawal of the third series on 18th January, 1919, exceeded £1,600,000,000.

*War Savings Certificates.*

At the same time, the sale of War Savings Certificates continued without intermission with results as shown below :—

	£
From start of issue to 31st December, 1917 ... ..	104,600,000
Sold in the quarter ended 31st March, 1918 ... ..	31,600,000

Sold in the quarter ended 30th June, 1918 ... ..	£ 23,800,000
Sold in the quarter ended 30th September, 1918 ... ..	21,300,000
Sold in the quarter ended 31st December, 1918 ... ..	25,300,000
	<hr/> £206,600,000 <hr/>

### Revenue.

The Budget was opened on the 22nd April, 1918, when the Chancellor of the Exchequer was able to state that there had been an excess over his estimates under every head of taxation.

#### 1917-18.

The total revenue for the year 1917-18 amounted to £707,235,000, including £220,214,000 proceeds of Excess Profits Duty. The revenue had been estimated at £638,600,000: of the excess of £68,635,000, £25,000,000 was due to the fact that the Indian War Loan, the proceeds of which were placed at the disposal of His Majesty's Government as part of India's contribution of £100,000,000 towards war expenditure, realised £35,000,000, while it had been estimated that only £10,000,000 could be raised in this way: and a further £20,214,000 is accounted for by the difference between the estimated and the actual yield of Excess Profits Duty.

#### 1918-19.

In the Budget introduced by the Chancellor for the year 1918-19, which passed through the House practically without amendment, the total increased taxation imposed was estimated to produce £67,800,000 in the year 1918-19 and in a full year £114,500,000. Increases were made in the rates of Income Tax and Super-Tax, and additional taxation was imposed on Spirits, Beer, Tobacco, Sugar and Matches. The rate of Excess Profits Duty remained unchanged. The Post Office rates were increased and the duty on cheques and other bills of exchange and promissory notes formerly charged with the duty of 1d. was raised to 2d. A proposed new tax on luxuries was, after discussion, not proceeded with.

The estimates made in connection with the Budget placed the total revenue for the current financial year at £842,050,000, of which £300,000,000 represented the estimated yield of Excess Profits Duty.

The revenue actually collected in 1918-19 proved to be £889,021,000, an increase over the Budget Estimate of £46,971,000.

**Expenditure.****1917-18.**

The total expenditure for the year 1917-18 was £2,696,221,000, an increase of £405,840,000 over the Budget estimate. Of this total £2,402,800,000 represented expenditure out of the Votes of Credit, an increase over the estimate of £427,800,000, mainly due to Army expenditure, expenditure on foodstuffs and advances to the Allies. The saving on the heads other than Votes of Credit was due to the fact that Treasury Bills were sold at a lower rate than was anticipated, with a consequent diminution in the debt charge.

It was pointed out in the War Cabinet Report for 1917 that this increase in large part represented recoverable expenditure, and the final figures showed that of the total increase of £427,800,000, £224,800,000 was due to recoverable items.

**1918-19.**

The estimated total expenditure for the year 1918-19 as proposed in the Budget speech was £2,972,197,000, of which £2,550,000,000 represented Vote of Credit expenditure. On this basis the estimated daily average was £8,143,000 for total expenditure and £6,986,000 for Vote of Credit expenditure.

In fact, up to the 31st December the total issues from the Exchequer (including Consolidated Fund Services and Supply Services) averaged £7,454,522 a day.

The total expenditure for 1918-19 ultimately proved to be £2,579,301,000, or £7,067,000 a day, a saving on the Budget Estimate of £392,896,000.

The saving on the Budget average is due to the saving on Vote of Credit Expenditure.

An analysis of the Vote of Credit expenditure for various periods gives the following results :—

**VOTE OF CREDIT EXPENDITURE.**

For the period 1st April to 13th July.	For the period 14th July to 19th October.	For the period 1st April to 19th October.	For the period 1st April to 28th December.	For the period 1st April to 31st March.
£ 724,000,000 or 6,962,000 a day.	£ 627,000,000 or 6,398,000 a day.	£ 1,351,000,000 or 6,688,000 a day.	£ 1,809,734,000 or 6,653,000 a day.	£ 2,198,000,000 or 6,022,000 a day.

As compared in each case with a Budget Estimate of £6,986,000.

It will be seen that, as was the case last year, the daily issues in the earlier part of the year were heavier than those in the later. The reason, as before, is that the earlier figures include payments for supplies of food, the value of which is realised later in the year.

## **EXTERNAL FINANCE.**

The year 1918 witnessed a continuance of the efforts of the Government to provide for the finance of all important supplies of raw materials, munitions and foodstuffs from foreign countries. The association with the United States of America as a co-belligerent throughout the year relieved the British Treasury of all pressing necessity as regards supplies from North America, and to this extent the most important problem of external finance, which existed during the earlier period of the war, practically ceased to exist. On the other hand, insistent demands upon British man-power and the growing restriction of tonnage, accentuated by the transport in British vessels of more than half the American troops despatched to Europe, enhanced by curtailing still further the export trade of the United Kingdom, the difficulties experienced in paying our way in neutral countries. In more than half a dozen countries loans were successfully raised on not unfavourable terms and a marked improvement was thereby effected in the course of the neutral exchanges on London, which at one time in the year had sunk to a low level.

We continued to make large advances to our Allies for the purchase of goods in all parts of the world and for services rendered by the British Government. The total cash advances to the Allies from 1st April, 1918, to 31st December, 1918, amounted to £133,000,000.

The total obligations of the Allies to the United Kingdom on the same date in respect of advances since the beginning of the war were in round figures—Russia, £568,094,000; France, £418,179,000; Italy, £364,040,000; other Allies, £136,524,000. Total, £1,486,837,000.

## **IMPERIAL FINANCE.**

In the period from 1st April to 31st December, 1918, cash advances to the Dominions amounted to £31,645,000. The total obligations of the Dominions to the Imperial Exchequer amounted in round figures to £145,473,000. There has been no variation during the year from the policy outlined in the previous report, whereby the Government of India and the Dominion Governments assisted the Imperial Treasury. Particular reference may perhaps be made, without detracting from the efforts of other parts of the Empire, to the large sums which were raised in Canada to finance for the British Government the export of foodstuffs and the output of munitions of war.

## CHAPTER XVIII.

**LEGISLATION OF SESSION 1918.**

The Acts of Parliament passed during the session of 1918 may be grouped under the following headings :—

**I.—Financial.**

*Consolidated Fund (No. 1) Act* authorises the issue out of the Consolidated Fund of £906,468 for the financial year 1917-18 and of £645,267,000 for the financial year 1918-19.

*Consolidated Fund (No. 2) Act* authorises the issue out of the Consolidated Fund of £500,878,040 for the financial year 1918-19.

*Consolidated Fund (No. 3) Act* authorises the issue out of the Consolidated Fund of £750,587,359 for the financial year 1918-19.

*Appropriation Act* authorises the issue out of the Consolidated Fund of £10 for the financial year 1916-17 and of £702,656,000 for the financial year 1918-19; and appropriates the Supply granted during the session.

*Finance Act* continues the Customs and Excise duties imposed by the Finance Act, 1915; increases the duties on spirits, beer, tobacco, sugar and matches; increases the rate of income tax and super tax, and grants certain additional abatements of income tax; continues Excess Profits duty; and gives power to extend the currency of War Savings Certificates.

*Government War Obligation Act* extends Section 1 of the Government War Obligations Act, 1914, so as to include Government war obligations incurred before August 8th, 1918; and extends the Schedule to that Act so as to include undertakings given to a foreign State for the purpose of securing the release of cargoes on interned enemy vessels.

*Post Office Act* authorises the increase of the postal rates chargeable for inland postcards and inland book packets.

*War Loan Act* gives power to the Treasury to raise money to meet the Supply granted for the current year; and amends previous War Loan Acts.

**II.—Relating to Parliament.**

*Parliament and Local Elections Act* extended the life of the current Parliament to eight years and provided for the further postponement of local elections.

*Parliament (Qualification of Women) Act* provides that women shall not be disqualified by sex or marriage for membership of the House of Commons.

*Representation of the People (Amendment) Act* extends for the period of the war and a year thereafter the maximum time which may elapse between the close of the poll and the counting of the votes.

### III.—Relating to the Imperial Government.

*Ministry of Munitions Act* extends the purposes of the Ministry of Munitions so as to cover the conversion of war industries to the work of producing goods required in peace.

*Overseas Trade Department (Secretary) Act* authorises the joint appointment, by the Board of Trade and the Secretary of State for Foreign Affairs, of a Secretary of the Department of Overseas Trade (Development and Intelligence).

### IV.—Relating to the Navy, Army and Air Force.

*Deputy Lieutenants Act* provides that future Deputy Lieutenants shall be resident in the county or within seven miles thereof, and shall have rendered worthy service in, or in connection with, the Navy, Army or Air Force.

*Military Service (No. 2) Act* extends the obligation of military service to all who had not attained the age of 51 years at the date of the passing of the Act; gives power to His Majesty, by Order in Council, to extend the provisions of the Act to Ireland and to withdraw certificates of exemption in case of national emergency; and amends the law with respect to applications for certificates for exemption, and to calling up.

*Naval Prize Act* provides for the establishment of a Naval Prize Fund, for the payment of prize money out of that fund and for the disposal of the residue of the Fund.

*War Pensions (Administration Provisions) Act* provides that the administrative expenses of local or joint committees shall be defrayed out of moneys provided by Parliament; gives the Minister of Pensions additional powers to regulate the constitution and proceedings of committees; requires the Minister to provide for the care of neglected children of deceased sailors, soldiers and airmen; and otherwise amends the War Pensions Acts.

### V.—Relating to Labour.

*Defence of the Realm (Employment Exchanges) Act* gives power to the Commissioners of Works, on behalf of the Minister of Labour, to requisition premises for use as Employment Exchanges in connection with schemes of demobilisation.

*Trade Boards Act* empowers the Minister of Labour to extend by special order the provisions of the Trade Boards Act, 1909, to other trades and to withdraw trades from the operation of the

Act; prescribes the procedure for making special orders; and amends the Trade Boards Act, 1909, in respect of, *inter alia*, the fixing of minimum rates of wages.

*Wages (Temporary Regulation) Act* prescribes that, for a period of six months, minimum rates of wages shall be paid to certain classes of workmen.

*Workmen's Compensation (Illegal Employment) Act* empowers an arbitrator in certain circumstances to deal with an accident to a person working under an illegal contract of service or apprenticeship as if it had happened to a person working under a valid contract.

*Workmen's Compensation (Silicosis) Act* authorises the Secretary of State to provide, by a scheme, for the payment of compensation to workmen employed in any industry involving exposure to silica dust.

## VI.—Relating to Agriculture.

*Corn Production (Amendment) Act* provides that part IV of the Corn Production Act, 1917, shall not come into operation until the termination of the war; and continues the powers of the Board of Agriculture under the Defence of the Realm Regulations to maintain the food supply of the country.

*Flax Companies (Financial Assistance) Act* gives power, during the war, to companies and other bodies, with the consent of the Board of Trade, to give financial assistance to companies formed for the cultivation of flax, and to borrow money for the purpose.

*Horse Breeding Act* prohibits the travelling and exhibiting of stallions for service except under licence from the Board of Agriculture; and provides for the inspection of stallions.

*Land Drainage Act* gives power to the Board of Agriculture to constitute drainage districts and to alter the boundaries of existing districts; prescribes the procedure to be followed in the making of orders for these purposes; empowers local authorities to contribute to the expense of drainage; gives the Board of Agriculture power to enforce the proper performance of duties under the Act or, in default, itself to exercise drainage powers; and to execute drainage works in small drainage districts.

*Small Holding Colonies (Amendment) Act* increases the area of land which may be acquired for the purposes of Section 1 of the Small Holding Colonies Act, 1916.

*Tithe Act* enacts that after 1915 tithe rent charge shall be based on the average price of corn for 15 instead of 7 years; and provides for the compulsory redemption of rent charges exceeding twenty shillings.

## VII.—Relating to Education.

*Education Act* provides that local education authorities shall submit to the Board of Education schemes for the development

of education in elementary schools and for the establishment of continuation schools; raises the normal elementary school age to 15; provides for the compulsory attendance at continuation schools of certain young persons; imposes further restrictions on the employment of children; extends the powers and duties of education authorities with respect to social and physical training, medical inspection, nursery schools, etc.; and amends in various particulars the administrative provisions of the Education Acts.

*Education (Scotland) Act: See under XI.*

*School Teachers (Superannuation) Act* makes provision for the payment of pensions to school teachers who have attained the age of sixty and fulfilled certain other conditions; and for the payment of gratuities to teachers incapacitated by infirmity of mind or body, and to the legal representatives of deceased teachers.

### **VIII.—Relating to Trade, Industry and Commerce.**

*Defence of the Realm (Beans, Peas and Pulse Orders) Act* applies to the original consignees of certain beans, peas and pulse, two orders of the Food Controller, and makes provision for the case in which the property has passed from the original consignee to another person.

*Defence of the Realm (Food Profits) Act* renders a person who has sold goods at a price in excess of that fixed by the Food Controller liable to an additional penalty of double the amount of the excess.

*Petroleum (Production) Act* prohibits the boring for or getting of petroleum except on behalf of His Majesty or under licence; and confers powers on the Minister of Munitions in respect of the issue of licences.

*Trading with the Enemy (Amendment) Act* gives power to the Board of Trade to order the winding up of companies of enemy nationality or association; prohibits for five years after the war the carrying on of banking businesses in the United Kingdom for the benefit of or under the control of enemies; extends the powers of the Board of Trade to make winding up orders under the Trading with the Enemy Act, 1916; and otherwise amends the provisions of that Act.

### **IX.—Relating to Courts of Justice, Legal Procedure, etc.**

*Juries Act* limits during the war the cases in which juries are required for trials in the High Court, in County Courts, and in other inferior courts; extends the age of liability to jury service; and provides for the modification of statutory provisions relating to the preparation and publication of jury lists.



*Solicitors (Articled Clerks) Act* empowers the Master of the Rolls to reckon periods of service with the forces and certain other specified forms of service as service of articles, and to grant exemption from the Intermediate Examination on the ground of circumstances arising out of the war.

*Summary Jurisdiction (Ireland) Act* : See under XII.

## **X.—Miscellaneous.**

*Affiliation Orders (Increase of Maximum Payment) Act* increases to ten shillings the maximum weekly sum payable under affiliation orders.

*Asylums and Certified Institutions (Officers' Pensions) Act* extends the Asylums Officers' Superannuation Act, 1909, to officers and servants employed in certified institutions for defectives.

*British Nationality and Status of Aliens Act* empowers the Secretary of State in certain specified circumstances to revoke certificates of nationalisation; and amends in detail the British Nationality and Status of Aliens Act, 1914.

*Increase of Rent, &c. (Amendment) Act* provides that the word "landlord" in Section 1 (3) of the Increase of Rent and Mortgage Interest (War Restrictions) Act, 1915, shall not include, except in specified circumstances, a person who has acquired a dwelling house since September 30th, 1917.

*Loans (Incumbents of Benefices) Amendment Act* prescribes regulations for obtaining loans from Queen Anne's Bounty for certain purposes; and makes other provisions with respect to such loans.

*Maternity and Child Welfare Act* empowers local authorities to make such arrangements (other than a general domiciliary service by doctors) as may be sanctioned by the Local Government Board, for attending to the health of expectant mothers, nursing mothers and children under five; and provides for the appointment by local authorities of maternity and child welfare committees.

*Midwives Act* provides for the revision of the constitution of the Central Midwives Board and for the payment of the expenses of members of the Board; authorises the Board to suspend a midwife from practice in lieu of striking her name off the roll; and otherwise amends the Midwives Act, 1902.

*Police (Pensions) Act* extends the power of a police authority in certain circumstances to grant pensions to the widows of deceased constables.

*Statutory Undertakings (Temporary Increase of Charges) Act* empowers the appropriate Government Department to vary the statutory rates of charge in the case of any undertaking, the financial position of which has been adversely affected by the war.

*Termination of the Present War (Definition) Act* authorises His Majesty by Order in Council to declare what date (being as nearly as may be the date of the ratification or exchange of the treaties of peace) is to be treated as the date of the termination of the war for the purpose of any Act of Parliament, Order in Council, or Proclamation.

*Trustee Savings Bank Act* renders any trustee savings bank which carries on the business of making special investments subject, so far as relates to that business, to the control of the National Debt Commissioners; and provides for the establishment of a guarantee fund to meet deficiencies on special investments accounts.

### **XI.—Relating Exclusively to Scotland.**

*Burghs Gas Supply (Scotland) Amendment Act* provides that the Gas Contingent Guarantee Rate may be used to provide sums for a sinking fund or any other annual expenditure under the Burghs Gas Supply (Scotland) Act, 1876.

*Education (Scotland) Act* provides for the election of "education authorities" in counties and certain specified burghs in Scotland, and for the constitution of "school management committees"; defines the powers of education authorities with respect to facilitating attendance at secondary schools, the provision of books for general reading, religious instruction and nursery schools; raises the normal school age to fifteen and imposes further restrictions on the employment of children; prescribes the duties of education authorities with regard to the provision of continuation classes; and provides for the transfer of voluntary schools and for the constitution of an Advisory Council to the Education Department.

### **XII.—Relating Exclusively to Ireland.**

*Constabulary and Police (Ireland) Act* increases the rates of pay and pension for the Irish Constabulary and Dublin Metropolitan Police; extends the power to grant pensions to the widows of constables; and increases the rates of allowances to widows of inspectors.

*Labourers (Ireland) Act* suspends the operation of Section 15 of the Labourers (Ireland) Act, 1883, until one year after the termination of the war.

*Marriages (Ireland) Act* permits marriages to be solemnised in Ireland between the hours of 8 a.m. and 3 p.m., instead of between 8 a.m. and 2 p.m.

*Public Health (Borrowing Powers) (Ireland) Act* extends the borrowing powers of District Councils under the Public Health (Ireland) Acts so as to include borrowing for the purpose of providing additional working capital for gas, water, electricity and other public undertakings.

*Special Commission (Belfast Prison) Act* constitutes a special commission to enquire into complaints as to the treatment of prisoners in Belfast Prison.

*Stockbrokers (Ireland) Act* provides for the alteration of the rate of commission of brokerage chargeable by a licensed stockbroker in Ireland on dealings in Government stock.

*Summary Jurisdiction (Ireland) Act* provides that the Dublin Metropolitan Police District and the remainder of the county of Dublin shall be adjoining counties for the purposes of Section 11 of the Petty Sessions (Ireland) Act, 1851; and otherwise amends that Act and the Fines Act (Ireland), 1851.

### **XIII.—Consolidation Act.**

*Income Tax Act.*

### **XIV.—Annual Acts.**

*Army (Annual) Act.*

*Expiring Laws Continuance Act.*

*Isle of Man (Customs) Act.*

*Public Works Loans Act.*

The following Government Bills were introduced into, but not passed by, the House of Commons :—

Constabulary and Police (Ireland) Bill.

Emigration Bill.

Housing Bill.

Irish Land (Provision for Sailors and Soldiers) Bill.

Ministries of Health Bill.

Post Office Bill.

Small Holdings and Allotments Bill.

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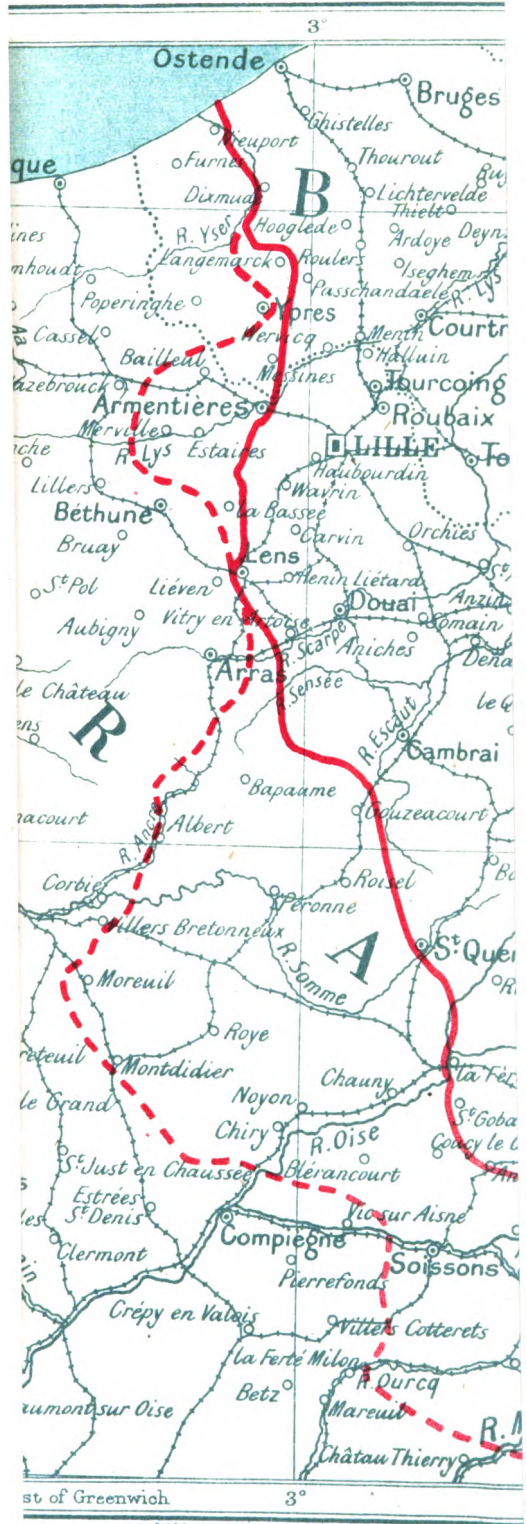
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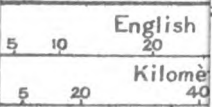
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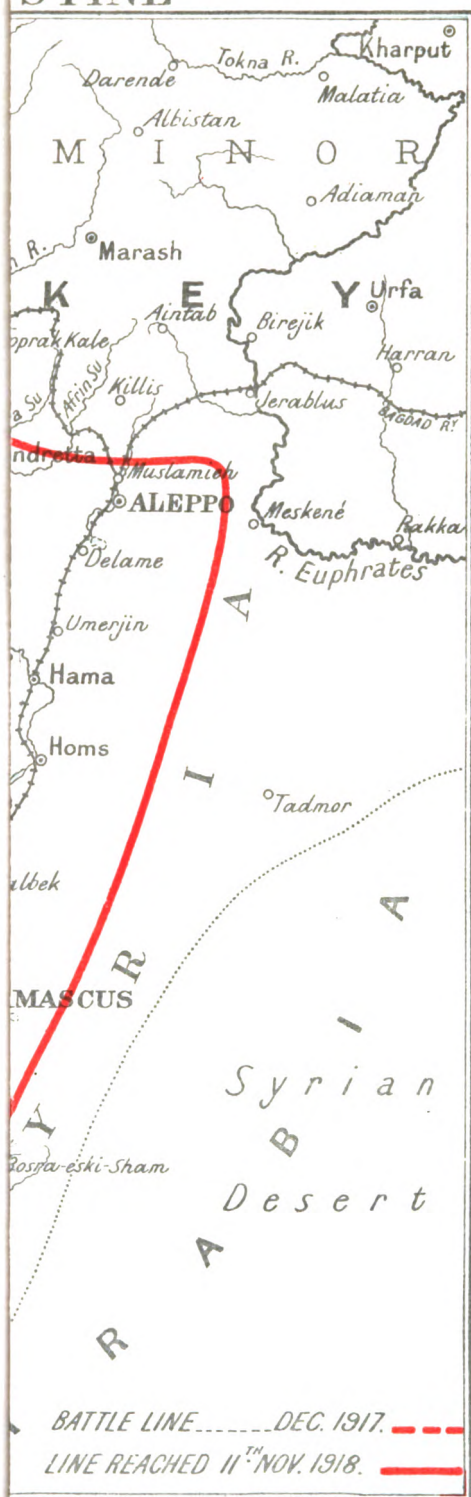
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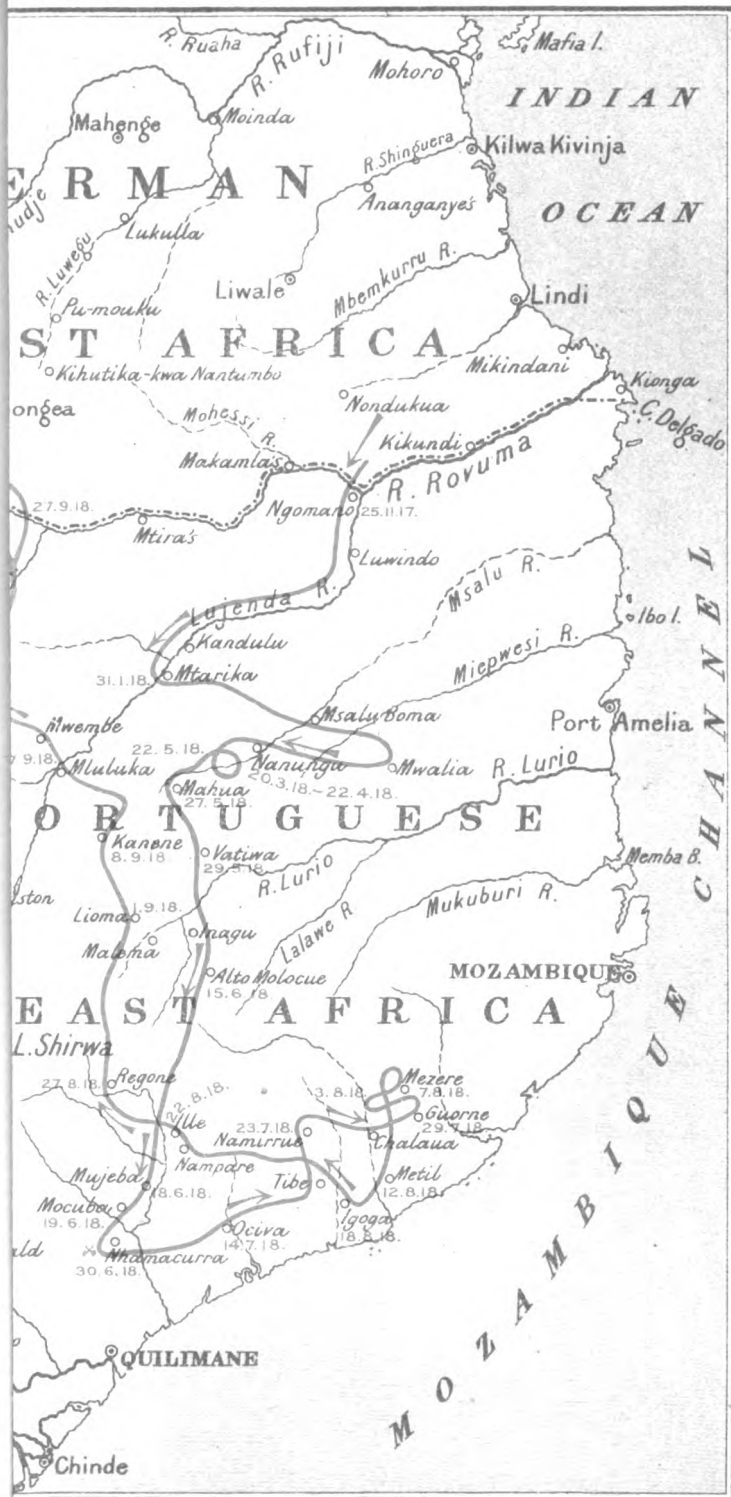
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